EDITION
HEETS

SRA
MATHEMATICS
LEARNING SYSTEM

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NAME _____

Underline the greater number in each pair.

	a	b	c	d
1.	44, 83	36, 61	88, 71	45, 43
2.	361, 532	896, 137	765, 675	321, 609
3.	1387, 125	1465, 4615	1191, 1911	3553, 3335

4. Write each set of numbers from smallest to largest.

a 34, 53, 16, 79 — 16, 34, 53, 79

b 137, 435, 241, 739 — 137, 241, 435, 739

c 462, 9, 48, 136 — 9, 48, 136, 462

d 165, 651, 156, 516 — 156, 165, 516, 651

e 3232, 2332, 2233, 3322 — 2233, 2332, 3232, 3322

5. Six different numbers can be written with three different digits. Write six different numbers for each set.

Example	a	b	c	d
1, 3, 5	6, 1, 2	5, 3, 2	8, 7, 9	4, 9, 1
135	612	325	978	194
513	216	235	789	149
351	126	523	897	419
315	261	532	987	941
153	621	352	879	914
531	162	253	798	491

6. Write each set of numbers in problem 5 from smallest to largest.

Ex. 135, 153, 315, 351, 513, 531

a 126, 162, 216, 261, 612, 621

b 235, 253, 325, 352, 523, 532

c 789, 798, 879, 897, 978, 987

d 149, 194, 419, 491, 914, 941

2705474

1. What is the value of each digit?

Example:

235

5 × 1 = 5

3 × 10 = 30

2 × 100 = 200

235

a

467

7 × 1 = 7

6 × 10 = 60

4 × 100 = 400

467

b

819

9 × 1 = 9

1 × 10 = 10

8 × 100 = 800

819

c

416

6 × 1 = 6

1 × 10 = 10

4 × 100 = 400

416

d

805

5 × 1 = 5

0 × 10 = 0

8 × 100 = 800

805

e

275

5 × 1 = 5

7 × 10 = 70

2 × 100 = 200

275

2. Complete.

a 4632 = 4 thousands, 6 hundreds, 3 tens, 2 ones

b 6598 = 6 thousands, 5 hundreds, 9 tens, 8 ones

c 1037 = 1 thousands, 0 hundreds, 3 tens, 7 ones

3. Write the numeral.

a Six thousand five hundred twenty-six 6526

b Forty thousand seven hundred forty-one 40 741

c Two hundred twenty thousand eighty-nine 220 089

4. Write the largest and the smallest number you can with the digits shown.

	largest	smallest		largest	smallest
a 3,8,1	831	138	**b** 3,1,3,1	3311	1133
c 7,1,5,2	7521	1257	**d** 1,2,9,9,9	99 921	12 999
e 1,1,2,1	2111	1112	**f** 9,9,1,9,1	99 911	11 999

Write the number that is more than or less than the number given.

	a	b	c
1.	10 more than 436 446	100 less than 436 336	100 more than 436 536
2.	10 more than 891 901	100 less than 891 791	100 more than 891 991
3.	10 more than 107 117	100 less than 107 7	100 more than 107 207

Write the largest and the smallest number possible, using the four digits named.

	largest	smallest
(1) Three, seven, six, four	7643	3467
(2) Six, five, three, six	6653	3566
(3) Seven, seven, four, one	7741	1477

Underline the larger number in each pair.

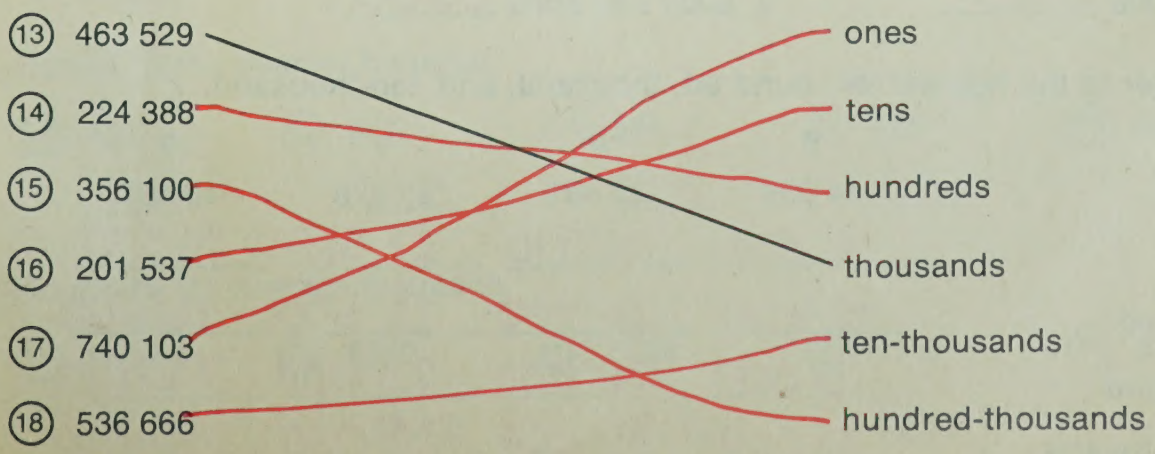
(4) 655, 565 (5) 55, 66 (6) 665, 656

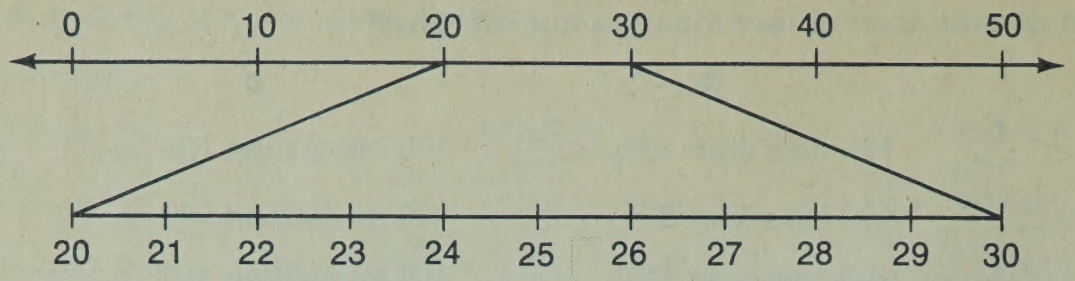
(7) 6656, 6566 (8) 6555, 5556 (9) 65, 66

Write the numbers in each set in order from least to greatest.

(10) 373, 733, 337, 73	73	337	373	733
(11) 2525, 5522, 2552, 5225	2525	2552	5225	5522
(12) 1001, 1100, 1010, 1101	1001	1010	1100	1101

Draw a line to the word that names the value of the digit 3 in each numeral.

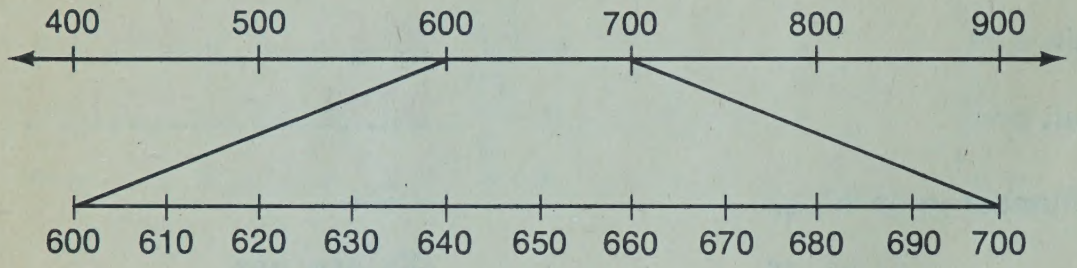




1. Is 22 closer to 20 or 30? 20 **2.** Is 29 closer to 20 or 30? 30

3. Is 26 closer to 20 or 30? 30 **4.** Is 37 closer to 30 or 40? 40

5. Is 84 closer to 80 or 90? 80 **6.** Is 53 closer to 50 or 60? 50



7. Is 630 closer to 600 or 700? 600 **8.** Is 610 closer to 600 or 700? 600

9. Is 689 closer to 600 or 700? 700 **10.** Is 671 closer to 600 or 700? 700

11. Is 658 closer to 600 or 700? 700 **12.** Is 649 closer to 600 or 700? 600

Write the number that is halfway between each pair.

13. **a** 20 and 30 25 **14.** **a** 50 and 60 55

b 200 and 300 250 **b** 500 and 600 550

c 2000 and 3000 2500 **c** 5000 and 6000 5500

Round each number to the nearest ten, hundred, thousand, and ten-thousand.

	a	**b**	**c**	**d**
	14 638	26 391	22 579	46 567
15. Nearest ten	14 640	26 390	22 580	46 570
16. Nearest hundred	14 600	26 400	22 600	46 600
17. Nearest thousand	15 000	26 000	23 000	47 000
18. Nearest ten-thousand	10 000	30 000	20 000	50 000

NAME _____

1. Underline the numbers you would round up to 70.

a	b	c	d	e	f
68	62	65	69	63	66

2. Underline the numbers you would round down to 400.

a	b	c	d	e	f
432	406	475	450	493	425

3. Underline the numbers you would round up to 3000.

a	b	c	d	e	f
2765	2098	2490	2600	2984	2497

4. Round each number to the nearest thousand.

a 2056 2000 **b** 8905 9000 **c** 7503 8000

d 5421 5000 **e** 7089 7000 **f** 4498 4000

What number is halfway between

① 0 and 100? 50 ② 400 and 500? 450

③ 300 and 400? 350 ④ 3000 and 4000? 3500

⑤ 7000 and 8000? 7500 ⑥ 0 and 1000? 500

Round to the nearest ten.

⑦ 47 50 ⑧ 62 60 ⑨ 45 50 ⑩ 67 70 ⑪ 12 10

Round to the nearest hundred.

⑫ 380 400 ⑬ 617 600 ⑭ 593 600 ⑮ 465 500 ⑯ 450 500

Round to the nearest thousand.

⑰ 3500 4000 ⑱ 6500 7000 ⑲ 7098 7000 ⑳ 9173 9000 ㉑ 8762 9000

1. If you wrote the smallest 4-digit number you could, which digits would you use? 1000

2. Attendance at the home games this year is expected to be about 3400. Each roll has 1000 tickets.
How many rolls should we buy this year? 4 rolls

3. It takes 550 books for Tuesday's reading program. There are 100 books per carton. How many cartons are needed? 6 cartons

4. Jo needs 43 pens.
There are 10 pens in each box.
How many boxes are needed? 5 boxes

> Japan is an island country in the Pacific Ocean two thousand ninety-two kilometres in length. It has a coast line twenty-six thousand five hundred kilometres long. A great deal of Japan is covered by mountains, many of which are volcanic. There are forty active but dormant volcanoes in Japan. The capital city of this country is Tokyo, which has a population of over eleven million people. Tokyo has always been a large city. In the year 1613, it had a population of one hundred fifty thousand people.

5. Read the story.

Write a numeral answer for each question.

a What is Japan's length? 2 092 km

b How long is its coast line? 26 500 km

c How many active volcanoes does Japan have? 40

d What is Tokyo's present population? 11 000 000

e What was Tokyo's population in 1613? 150 000

NAME _____

1. Round each number. Estimate the total for each pair of items.

a 39¢ train track 40¢
87¢ glider 90¢
estimate 130¢ or $1.30

b 63¢ paints 60¢
49¢ brush 50¢
estimate 110¢ or $1.10

c 21¢ paper 20¢
43¢ pens 40¢
estimate 60¢ or $0.60

d 55¢ puzzle 60¢
93¢ book 90¢
estimate 150¢ or $1.50

Round each number and estimate the sum.

	a	b	c	d
2.	36 → 40 + 49 → 50 90	58 → 60 + 39 → 40 100	19 → 20 + 94 → 90 110	78 → 80 + 96 → 100 180
3.	87 → 90 + 77 → 80 170	76 → 80 + 81 → 80 160	56 → 60 + 18 → 20 80	48 → 50 + 65 → 70 120

Write the exact sums.

	a	b	c	d	e	f
4.	10 + 5 15	14 + 1 15	23 + 9 32	37 + 9 46	18 + 4 22	69 + 5 74
5.	63 + 70 133	40 + 56 96	76 + 55 131	52 + 96 148	33 + 43 76	92 + 20 112
6.	64 + 36 100	29 + 64 93	70 + 97 167	77 + 88 165	46 + 62 108	36 + 96 132

Estimate each sum. Then find the exact sum.

1.

		Estimate	Exact
a	48 + 6	60	54
b	51 + 6	60	57
c	53 + 6	60	59
d	55 + 6	70	61
e	57 + 6	70	63

2.

		Estimate	Exact
a	68 + 16	90	84
b	71 + 16	90	87
c	73 + 16	90	89
d	75 + 16	100	91
e	77 + 16	100	93

3.

		Estimate	Exact
a	15 + 10	30	25
b	41 + 16	60	57
c	76 + 16	100	92
d	88 + 14	100	102
e	64 + 79	140	143
f	89 + 57	150	146

4.

		Estimate	Exact
a	23 + 48	70	71
b	37 + 51	90	88
c	19 + 38	60	57
d	12 + 82	90	94
e	39 + 54	90	93
f	72 + 23	90	95

Add.

① 30 + 60 = 90	② 10 + 10 = 20	③ 20 + 40 = 60	④ 40 + 90 = 130	⑤ 70 + 80 = 150	⑥ 40 + 80 = 120
⑦ 22 + 30 = 52	⑧ 10 + 32 = 42	⑨ 82 + 11 = 93	⑩ 14 + 82 = 96	⑪ 34 + 33 = 67	⑫ 71 + 17 = 88
⑬ 38 + 29 = 67	⑭ 37 + 57 = 94	⑮ 29 + 67 = 96	⑯ 59 + 29 = 88	⑰ 29 + 67 = 96	⑱ 34 + 26 = 60
⑲ 92 + 98 = 190	⑳ 59 + 44 = 103	㉑ 74 + 87 = 161	㉒ 66 + 98 = 164	㉓ 68 + 44 = 112	㉔ 56 + 65 = 121

Write each sum.

	a	b	c	d	e
1.	411 + 42 = 453	121 + 28 = 149	438 + 31 = 469	347 + 20 = 367	332 + 26 = 358
2.	694 + 92 = 786	589 + 79 = 668	795 + 88 = 883	339 + 68 = 407	180 + 80 = 260
3.	339 + 320 = 659	275 + 214 = 489	793 + 205 = 998	146 + 210 = 356	411 + 352 = 763
4.	505 + 974 = 1479	175 + 280 = 455	849 + 434 = 1283	688 + 465 = 1153	187 + 558 = 745
5.	766 + 287 = 1053	995 + 902 = 1897	367 + 529 = 896	658 + 655 = 1313	810 + 395 = 1205

Write exact answers without copying the problems.

	a		b		c		d	
6.	+	10	+	40	+	200	+	14
	245	255	331	371	268	468	132	146
	263	273	341	381	149	349	263	277
	109	119	351	391	627	827	138	152
	587	597	361	401	920	1120	295	309

7.	+	120	+	260	+	143	+	246
	120	240	130	390	231	374	625	871
	240	360	390	650	282	425	645	891
	360	480	650	910	339	482	765	1011
	480	600	910	1170	568	711	685	931

Estimate the answer. Then find the exact answer.

1. King School has 116 girls and 109 boys. How many students is this?

200
116
+109
225
students

2. Ada spent $1.35 for ribbon and $2.28 for thread. How much did she spend in all?

$3.00
$1.35
$2.28
$3.63

3. John read one book of 234 pages and one of 89 pages. How many pages did he read?

300
234
+89
323
pages

4. Amy delivered 367 calendars one day and 284 another. How many calendars did she deliver?

700
367
+284
651
Calendars

Round each number to the nearest ten and estimate the sums.

	a	b	c	d
5.	38 40	26 30	145 150	265 270
	46 50	59 60	230 230	709 710
	51 50	41 40	163 160	236 240
	23 20	21 20	419 420	541 540
	(160)	(150)	(960)	(1760)

Add.

(1) 300 + 500 800	(2) 300 + 217 517	(3) 133 + 214 347	(4) 431 + 530 961	(5) 442 + 525 967
(6) 115 + 866 981	(7) 644 + 318 962	(8) 151 + 819 970	(9) 337 + 549 886	(10) 118 + 939 1057
(11) 284 + 527 811	(12) 645 + 396 1041	(13) 976 + 944 1920	(14) 466 + 949 1415	(15) 849 + 572 1421

NAME _____

1. Round each number. Estimate the difference for each pair of items.

a 78¢ socks — 80¢
42¢ laces — 40¢
estimate 40¢

b 99¢ shampoo — 100¢
67¢ soap — 70¢
estimate 30¢

c $1.69 stamps — $1.70
$0.53 envelopes — $0.50
estimate $1.20

d $1.93 stapler — $1.90
$0.75 paper clips — $0.80
estimate $1.10

Round each number and estimate the difference.

	a	b	c	d
2.	88 − 28 = 90 − 30 = 60	78 − 27 = 80 − 30 = 50	94 − 89 = 90 − 90 = 0	31 − 15 = 30 − 20 = 10
3.	63 − 48 = 60 − 50 = 10	93 − 29 = 90 − 30 = 60	47 − 17 = 50 − 20 = 30	97 − 74 = 100 − 70 = 30

Write the exact difference.

	a	b	c	d	e	f
4.	98 − 4 = 94	82 − 4 = 78	35 − 7 = 28	79 − 9 = 70	43 − 8 = 35	67 − 8 = 59
5.	41 − 25 = 16	84 − 41 = 43	57 − 44 = 13	48 − 34 = 14	64 − 23 = 41	75 − 11 = 64
6.	81 − 13 = 68	59 − 13 = 46	95 − 90 = 5	99 − 27 = 72	90 − 78 = 12	64 − 17 = 47

Find each difference. Write the extra problems requested. Answers will vary.

1. Write three more problems that do not require renaming.

a	b	c	d	e
237 − 124 = 113	316 − 205 = 111	479 − 238 = 241	614 − 502 = 112	725 − 611 = 114

2. Write three more problems that require renaming tens as ones.

753 − 436 = 317	292 − 185 = 107	872 − 369 = 503	536 − 417 = 119	192 − 177 = 15

3. Write three more problems that require renaming hundreds as tens and tens as ones.

436 − 279 = 157	251 − 184 = 67	936 − 749 = 187	324 − 235 = 89	763 − 378 = 385

Find the differences.

	a	b	c	d	e
4.	655 − 307 = 348	744 − 352 = 392	887 − 513 = 374	878 − 506 = 372	646 − 344 = 302
5.	691 − 143 = 548	733 − 194 = 539	701 − 435 = 266	400 − 214 = 186	975 − 386 = 589

Subtract.

① 678 − 354 = 324	② 750 − 238 = 512	③ 350 − 147 = 203	④ 462 − 280 = 182
⑤ 623 − 561 = 62	⑥ 314 − 197 = 117	⑦ 605 − 148 = 457	⑧ 700 − 236 = 464

Bus Routes between Cities		
Route	City	Kilometres
A	Moncton to Sherbrooke	975
B	Calgary to Regina	764
C	Charlottetown to Fredericton	373
D	Winnipeg to Flin Flon	893
E	Vancouver to Banff	929
F	Ottawa to Halifax	1439

1. How much longer is route E than B?

929
-764
165 km

2. How much longer is route D than C?

893
-373
520 km

3. How much longer is route A than C?

975
-373
602 km

4. How much longer is route F than B?

1439
-764
675 km

Estimate the difference.
Then find the exact difference.
Is your answer reasonable?

5.

	a	b	c	d	e
	539	977	404	559	905
	− 449	− 508	− 198	− 175	− 265
	90	469	206	384	640
Estimate	(100)	(500)	(200)	(400)	(600)

Find the difference. Add to check.

6.

	a		b		c	
	579	435	671	490	801	234
	− 144	+ 144	− 181	+ 181	− 567	+ 567
	435	579	490	671	234	801

7.

	743	484	421	257	262	78
	− 259	+ 259	− 164	+ 164	− 184	+ 184
	484	743	257	421	78	262

Add.

	a	b	c	d	e
1.	83 + 54 = 137	95 + 97 = 192	76 + 63 = 139	87 + 85 = 172	59 + 11 = 70
2.	76 + 55 = 131	52 + 96 = 148	36 + 96 = 132	99 + 65 = 164	67 + 55 = 122
3.	557 + 375 = 932	837 + 433 = 1270	245 + 961 = 1206	846 + 324 = 1170	865 + 602 = 1467
4.	622 + 587 = 1209	470 + 820 = 1290	688 + 865 = 1553	384 + 265 = 649	887 + 697 = 1584

Subtract.

5.	48 − 37 = 11	64 − 14 = 50	179 − 35 = 144	466 − 256 = 210	928 − 237 = 691
6.	94 − 17 = 77	92 − 38 = 54	161 − 37 = 124	262 − 184 = 78	600 − 413 = 187
7.	884 − 413 = 471	801 − 329 = 472	643 − 637 = 6	974 − 277 = 697	958 − 610 = 348

Compute. Watch the signs.

8.	828 − 567 = 261	900 − 476 = 424	826 + 579 = 1405	956 + 431 = 1387	501 − 443 = 58

1. Complete each statement.

a

2 rows of 4 each

$4 + 4 = 8$

$2 \times 4 = 8$

b

3 rows of 5 each

$5 + 5 + 5 = 15$

$3 \times 5 = 15$

c

4 rows of 6 each

$6 + 6 + 6 + 6 = 24$

$4 \times 6 = 24$

d

$7 \times 4 = 28$

2. Write a multiplication fact for each array.

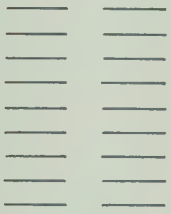
a

$3 \times 6 = 18$

b

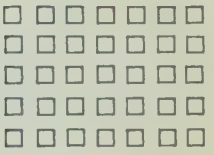
$2 \times 8 = 16$

c



$9 \times 2 = 18$

d



$5 \times 7 = 35$

Complete each chart.

3.	Count by fours.	4	8	12	16	20	24	28	32	36
4.	Count by sixes.	6	12	18	24	30	36	42	48	54
5.	Count by nines.	9	18	27	36	45	54	63	72	81

Multiply.

	a	b	c	d	e	f	g	h
6.	$2 \times 2 = 4$	$8 \times 1 = 8$	$8 \times 3 = 24$	$6 \times 2 = 12$	$3 \times 1 = 3$	$5 \times 7 = 35$	$5 \times 9 = 45$	$0 \times 5 = 0$
7.	$3 \times 4 = 12$	$7 \times 9 = 63$	$2 \times 3 = 6$	$1 \times 2 = 2$	$8 \times 7 = 56$	$5 \times 2 = 10$	$3 \times 6 = 18$	$9 \times 1 = 9$
8.	$7 \times 6 = 42$	$6 \times 0 = 0$	$4 \times 1 = 4$	$6 \times 9 = 54$	$8 \times 2 = 16$	$5 \times 8 = 40$	$1 \times 7 = 7$	$4 \times 6 = 24$

Practise.

1.	2.	3.	4.	5.	6.	7.
7 × 6 = 42	6 × 9 = 54	4 × 5 = 20	3 × 7 = 21	9 × 9 = 81	8 × 4 = 32	7 × 8 = 56

Multiply.

① 8 × 2 = 16	② 3 × 5 = 15	③ 4 × 1 = 4	④ 3 × 7 = 21	⑤ 8 × 6 = 48	⑥ 2 × 3 = 6	⑦ 8 × 5 = 40
⑧ 7 × 0 = 0	⑨ 9 × 4 = 36	⑩ 6 × 6 = 36	⑪ 3 × 9 = 27	⑫ 6 × 3 = 18	⑬ 8 × 9 = 72	⑭ 9 × 7 = 63

Solve each problem.

⑮ 6 windows on each floor.
4 floors in the building.
How many windows? 24

⑯ 3 shelves in the bookcase.
8 books on each shelf.
How many books in all? 24

⑰ 7 days a week.
7 km each day.
How many kilometres in all? 49

⑱ 3 trips up the steps.
3 boxes each trip.
How many boxes in all? 9

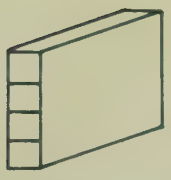
⑲ 6 tries to hit the ball.
9 boys on a team.
How many tries in all? 54

⑳ 4 birds in each cage.
4 cages.
How many birds in all? 16

㉑ 7 hours at work.
4 trips each hour.
How many trips? 28

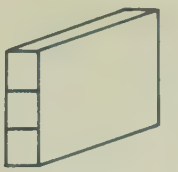
㉒ 3 turns for each girl.
9 girls take turns.
How many turns in all? 27

1. **a**



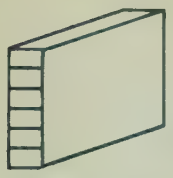
4 rows.
12 in all.
How many in each row? 3
4 × 3 = 12

b

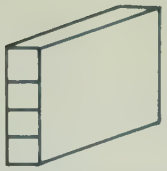


3 rows.
15 in all.
How many in each row? 5
3 × 5 = 15

2.



6 rows.
30 in all.
How many in each row? 5
6 × 5 = 30



4 rows.
28 in all.
How many in each row? 7
4 × 7 = 28

Complete each sentence.

a

3. 54 seats in all.
6 rows.
How many in each row?
6 × 9 = 54

b

16 girls.
4 girls in each car.
How many cars needed?
4 × 4 = 16

4. 27 in all.
9 rows.
How many in each row?
9 × 3 = 27

35 in all.
7 rows.
How many in each row?
7 × 5 = 35

Write the missing factor to complete each sentence.

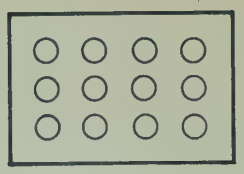
a	**b**	**c**
5. 2 × 5 = 10	8 × 3 = 24	4 × 2 = 8
6. 8 × 7 = 56	7 × 4 = 28	4 × 5 = 20
7. 5 × 6 = 30	2 × 8 = 16	6 × 1 = 6
8. 3 × 3 = 9	3 × 7 = 21	5 × 7 = 35
9. 7 × 7 = 49	2 × 6 = 12	5 × 8 = 40

Find the unknown factor in **a.** Divide to find the answer in **b.**

a

1. 12 in all.
3 rows.
How many in each row?

$3 \times \underline{4} = 12$



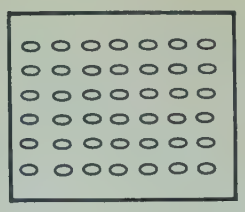
b

12 in all.
3 rows.
How many in each row?

$12 \div 3 = \underline{4}$

2. 42 in all.
7 in each row.
How many rows?

$\underline{6} \times 7 = 42$



42 in all.
7 in each row.
How many rows?

$42 \div 7 = \underline{6}$

Complete.

	a	**b**
3.	$20 \div 4 = \underline{5}$ because $\underline{5} \times 4 = 20$	$12 \div 6 = \underline{2}$ because $2 \times \underline{6} = 12$
4.	$15 \div 5 = \underline{3}$ because $\underline{3} \times \underline{5} = 15$	$8 \div 2 = \underline{4}$ because $\underline{4} \times \underline{2} = 8$
5.	$24 \div 3 = \underline{8}$ because $\underline{8} \times \underline{3} = \underline{24}$	$36 \div 4 = \underline{9}$ because $\underline{9} \times \underline{4} = \underline{36}$
6.	$27 \div 9 = \underline{3}$ because $\underline{3} \times \underline{9} = \underline{27}$	$28 \div 7 = \underline{4}$ because $\underline{4} \times \underline{7} = \underline{28}$
7.	$42 \div 6 = \underline{7}$ because $\underline{7} \times \underline{6} = \underline{42}$	$56 \div 8 = \underline{7}$ because $\underline{7} \times \underline{8} = \underline{56}$

Divide.

	a	**b**	**c**	**d**
8.	$21 \div 3 = \underline{7}$	$35 \div 5 = \underline{7}$	$16 \div 4 = \underline{4}$	$48 \div 8 = \underline{6}$
9.	$36 \div 6 = \underline{6}$	$7 \div 1 = \underline{7}$	$36 \div 9 = \underline{4}$	$63 \div 9 = \underline{7}$
10.	$24 \div 8 = \underline{3}$	$16 \div 2 = \underline{8}$	$21 \div 7 = \underline{3}$	$45 \div 9 = \underline{5}$
11.	$56 \div 7 = \underline{8}$	$40 \div 5 = \underline{8}$	$8 \div 8 = \underline{1}$	$72 \div 8 = \underline{9}$

Write the division sentence and find the answer.

a

12. 48 in all.
6 at each table.
How many tables?

$48 \div 6 = 8$

b

32 in all.
8 on each page.
How many pages?

$32 \div 8 = 4$

Divide.

① a 12 ÷ 3 = 4
b 16 ÷ 4 = 4
c 6 ÷ 2 = 3
d 5 ÷ 1 = 5
e 20 ÷ 5 = 4
f 8 ÷ 4 = 2
g 15 ÷ 3 = 5
h 4 ÷ 4 = 1
i 9 ÷ 3 = 3
j 8 ÷ 2 = 4

② a 21 ÷ 3 = 7
b 9 ÷ 9 = 1
c 32 ÷ 4 = 8
d 14 ÷ 7 = 2
e 45 ÷ 5 = 9
f 28 ÷ 4 = 7
g 18 ÷ 2 = 9
h 24 ÷ 8 = 3
i 12 ÷ 2 = 6
j 36 ÷ 9 = 4

③ a 28 ÷ 7 = 4
b 24 ÷ 3 = 8
c 36 ÷ 4 = 9
d 18 ÷ 6 = 3
e 30 ÷ 6 = 5
f 27 ÷ 9 = 3
g 35 ÷ 7 = 5
h 9 ÷ 1 = 9
i 14 ÷ 2 = 7
j 40 ÷ 8 = 5

④ a 56 ÷ 7 = 8
b 64 ÷ 8 = 8
c 63 ÷ 9 = 7
d 36 ÷ 6 = 6
e 81 ÷ 9 = 9
f 42 ÷ 7 = 6
g 48 ÷ 6 = 8
h 63 ÷ 7 = 9
i 49 ÷ 7 = 7
j 72 ÷ 9 = 8

Solve each problem.

⑤ 12 in all.
4 in each set.
How many sets? 3

⑥ 27 in all.
3 in each day.
How many days? 9

⑦ 32 in all.
8 in each box.
How many boxes? 4

⑧ 72 in all.
8 each trip.
How many trips? 9

Write the answer to each problem.

	a	b
1.	John had 4. Kay had 0. How many in all? 4	Mary's score was 3. Robert's score was 3. What was the difference? 0
2.	There were 0 cats. There were 0 dogs. How many cats and dogs? 0	4 were right. 0 were wrong. How many more right than wrong? 4
3.	There are 3 boxes. Each box has 1 book. How many books? 3	Each shelf has 0 books. There are 3 shelves. How many books? 0

Compute.

	a	b	c	d
4.	5 + 0 = 5	6 − 0 = 6	3 × 0 = 0	0 ÷ 4 = 0
5.	0 + 7 = 7	12 − 0 = 12	0 × 7 = 0	0 ÷ 7 = 0
6.	0 + 8 = 8	4 − 0 = 4	8 × 0 = 0	0 ÷ 5 = 0
7.	6 + 0 = 6	9 − 0 = 9	0 × 6 = 0	0 ÷ 8 = 0
8.	7 + 1 = 8	9 − 1 = 8	4 × 1 = 4	8 ÷ 1 = 8
9.	4 + 1 = 5	6 − 1 = 5	1 × 8 = 8	9 ÷ 1 = 9
10.	8 + 1 = 9	3 − 1 = 2	5 × 1 = 5	3 ÷ 1 = 3
11.	1 + 3 = 4	8 + 0 = 8	1 × 7 = 7	7 − 0 = 7
12.	5 − 1 = 4	7 ÷ 1 = 7	6 + 1 = 7	4 × 0 = 0
13.	0 ÷ 9 = 0	6 × 1 = 6	8 − 1 = 7	0 ÷ 1 = 0
14.	0 × 9 = 0	5 − 0 = 5	2 ÷ 1 = 2	0 + 1 = 1

Multiply.

	a	b	c	d	e	f
1.	7 × 3 = 21	5 × 6 = 30	4 × 9 = 36	6 × 7 = 42	8 × 9 = 72	7 × 2 = 14
2.	7 × 8 = 56	9 × 3 = 27	3 × 6 = 18	4 × 5 = 20	5 × 9 = 45	9 × 6 = 54

Divide.

	a	b	c	d
3.	24 ÷ 6 = 4	18 ÷ 3 = 6	28 ÷ 4 = 7	54 ÷ 9 = 6
4.	40 ÷ 8 = 5	14 ÷ 7 = 2	27 ÷ 9 = 3	30 ÷ 5 = 6
5.	72 ÷ 9 = 8	64 ÷ 8 = 8	56 ÷ 8 = 7	81 ÷ 9 = 9

Answer each question.

6. **a** 5 aunts, 5 uncles, 5 cousins.

How many people? 15

b 7 mothers, 7 fathers, 7 sisters, 7 brothers.

How many people? 28

c 8 teachers, 8 doctors, 8 farmers, 8 sailors.

How many people? 32

7. **a** 36 hours flying time. 9 hours for each flight.

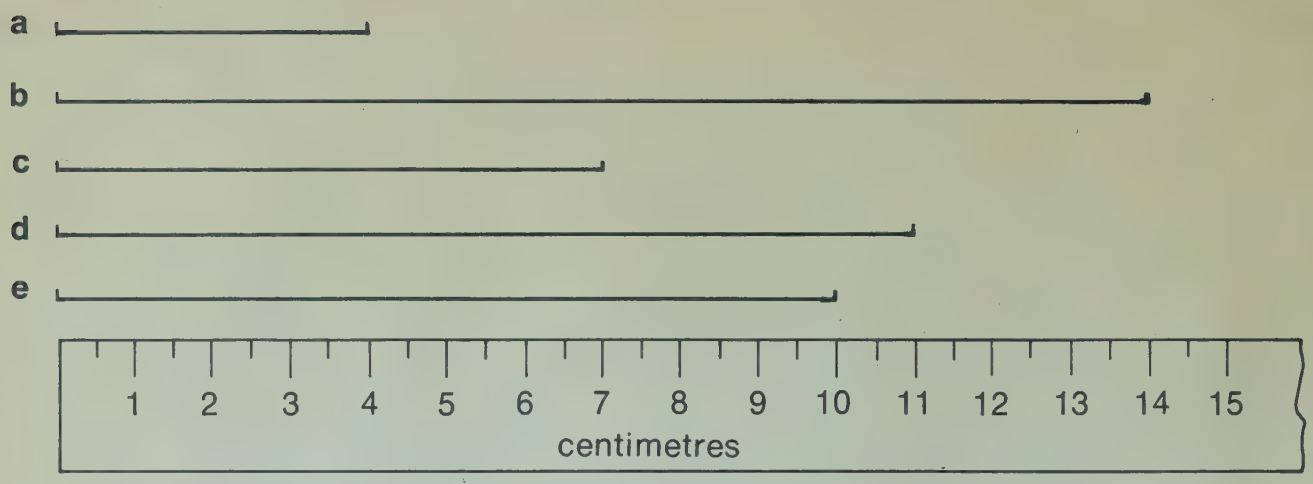
How many flights? 4

b 28 passengers. 4 seats in each row.

How many rows can be filled? 7

c 12 crew members. 4 flights.

How many crew members on each flight? 3



Answer each question.

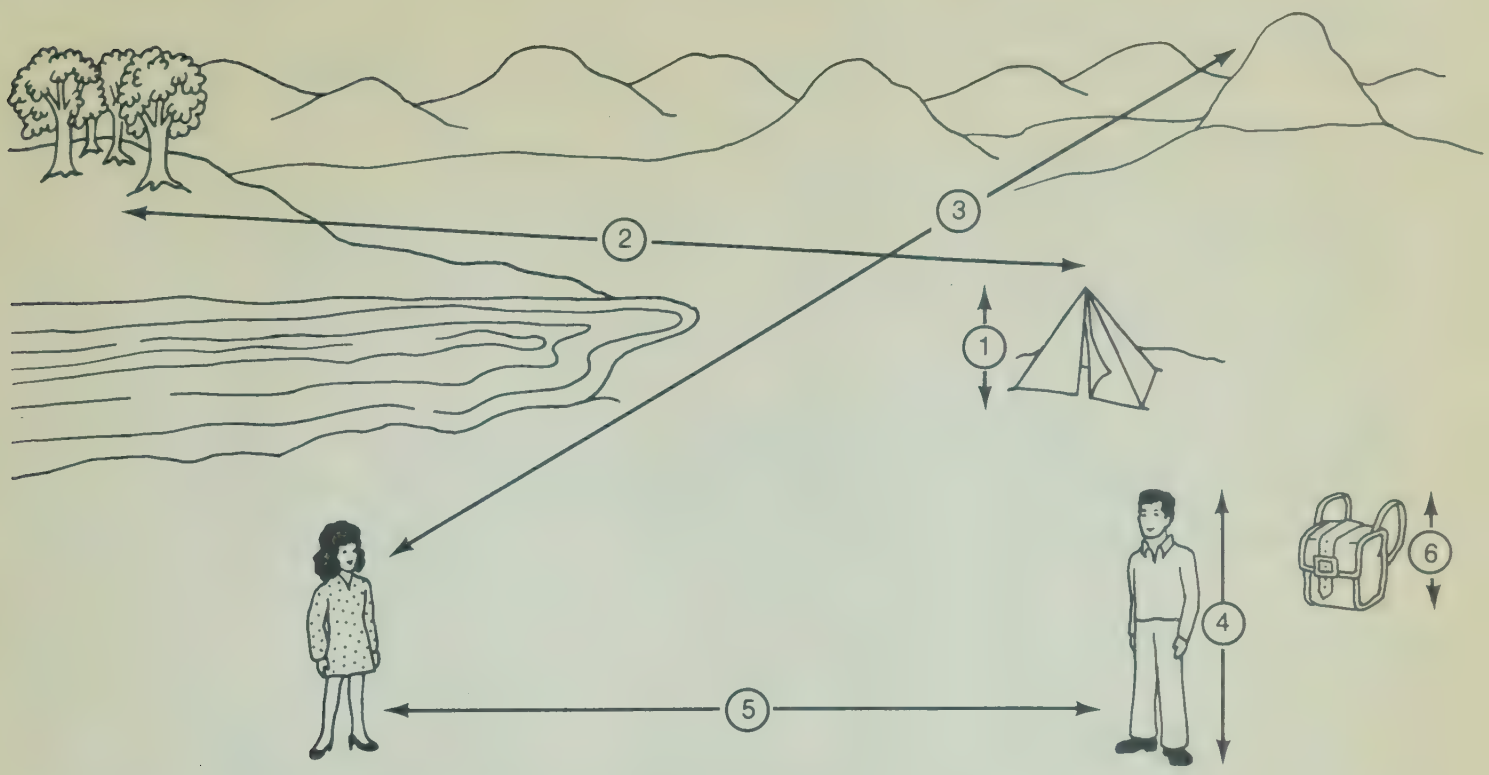
1. Is line **a** closer to 4 cm or 5 cm long? 4 cm
2. Is line **b** closer to 13 cm or 14 cm long? 14 cm
3. Is line **c** closer to 6 cm or 7 cm long? 7 cm
4. Is line **d** closer to 10 cm or 11 cm long? 11 cm
5. Is line **e** closer to 9 cm or 10 cm long? 10 cm

Answer each question.

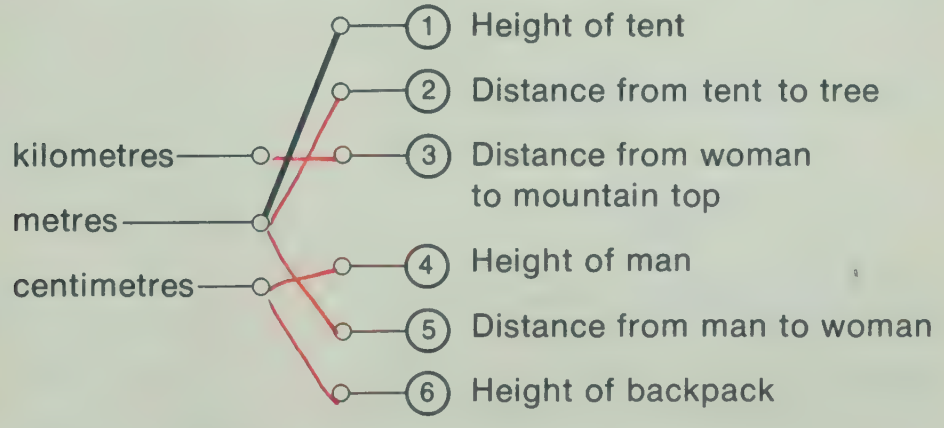
6. **a** How many millimetres are there in 1 cm? 10 mm
   b How many millimetres are there in 3 cm? 30 mm
   c How many millimetres are there in 7 cm? 70 mm
   d How many millimetres are there in 4 cm? 40 mm
   e How many millimetres are there in 50 cm? 500 mm

Answer each question.

7. **a** How many metres are there in 400 cm? 4 m
   b How many metres are there in 600 cm? 6 m
   c How many metres are there in 900 cm? 9 m
   d How many metres are there in 1000 cm? 10 m
   e How many metres are there in 200 cm? 2 m



Match each length with the appropriate unit, as shown.



Write the correct numeral and symbol for each measurement.

(7) five centimetres 5 cm

(8) thirteen kilometres 13 km

(9) one kilometre 1 km

(10) twenty metres 20 m

(11) sixteen millimetres 16 mm

(12) seven millimetres 7 mm

(13) ten metres 10 m

(14) one hundred thirty-eight metres 138 m

1. The distance from Calgary to Edmonton is 299 km . The distance from Edmonton to Regina is 785 km . How far is it from Calgary to Regina by way of Edmonton?

1084 km

2. The distance from Gaspe to Moncton is 669 km . The distance from Gaspe to Fredericton is 700 km . How much farther is it from Gaspe to Fredericton than it is to Moncton?

31 km

3. The Smith family took a four-day trip. On Monday they drove 278 km, on Tuesday 346 km, on Wednesday 362 km, and on Thursday 169 km . How many kilometres did they drive on the trip?

1155 km

Find the sum or difference.

	a	b	c
4.	6 m 7 cm + 4 m 2 cm 10 m 9 cm	4 m 33 cm + 46 m 23 cm 50 m 56 cm	54 m 32 cm − 23 m 19 cm 31 m 13 cm
5.	87 m 45 cm − 49 m 36 cm 38 m 9 cm	32 m 16 cm − 14 m 11 cm 18 m 5 cm	6 m 7 cm + 9 m 22 cm 15 m 29 cm

6. A rope is 7 m 5 cm long. A piece 5 m 4 cm long is cut from it.

How much rope is left? 2 m 1 cm

7. Complete the tables.

a

km	m
1	1000
6	6000
9	9000
3	3000

b

m	cm
2	200
8	800
50	5000
3	300

c

cm	m
400	4
600	6
900	9
700	7

Tell how many metres and how many centimetres in each question.

1.	3.15 m is	3	m	15 cm
2.	19.37 m is	19	m	37 cm
3.	0.02 m is	0	m	2 cm
4.	9.16 m is	9	m	16 cm
5.	11.27 m is	11	m	27 cm
6.	5.75 m is	5	m	75 cm

Write each of these with a decimal point and the symbol m .

	a		b	
7.	4 m 45 cm	4.45 m	7 m 41 cm	7.41 m
8.	16 m 11 cm	16.11 m	12 m 52 cm	12.52 m
9.	3 m 50 cm	3.50 m	2 m 3 cm	2.03 m
10.	9 m 32 cm	9.32 m	8 m 19 cm	8.19 m
11.	10 m 24 cm	10.24 m	13 m 2 cm	13.02 m

Write the answer to each problem.

① Carol is 93 cm tall.
Amy is 65 cm tall.
What is the difference
in their heights? 28 cm

② Tom's vegetable garden is 12 m long. Jim's is 16 m long.
What is the total length
of both gardens? 28 m

③ Bill is 53 cm tall.
Joe is 39 cm tall.
What is the total of
both their heights? 92 cm

④ Jane ran 100 m in a relay.
Carol ran 400 m in a relay.
How much farther did
Carol run? 300 m

Complete the tables.

1.

a

weeks	days
1	7
3	21
5	35
8	56

b

months	weeks
1	4
2	8
4	16
9	36

c

years	months
1	12
3	36
5	60
8	96

Rename.

a

2. 3 h 26 min is 2 h 86 min .

3. 4 years 3 months is 3 years 15 months.

b

5 h 15 min is 4 h 75 min .

2 min 35 s is 1 min 95 s .

Add or subtract.

a

4. 4 years 5 months
+2 years 3 months
6 years 8 months

5. 3 weeks
+2 weeks 4 days
5 weeks 4 days

b

7 h 42 min
−1 h 16 min
6 h 26 min

~~6~~ 5 h ~~60~~ 60 min
−1 h 12 min
4 h 48 min

c

~~5~~ 4 days ~~16~~ 40 h
−2 days 18 h
2 days 22 h

9 weeks 5 days
+2 weeks 6 days
11 weeks 11 days or
12 weeks 4 days

6. Andrew plays the piano.
He kept a record of his practice time in minutes.
How much did he practise each week?

	First week	Second week	Third week	Fourth week
Monday	25	12	0	20
Tuesday	30	20	18	0
Wednesday	15	15	25	0
Thursday	0	23	25	38
Friday	20	30	25	40
	90	100	93	98

7. How much longer did Andrew practise the second week than the first? 10 min

8. How much longer did he practise the fourth week than the third? 5 min

1. Each person drove at a speed of 50 km/h .

   a Tom drove 100 km . How many hours did he drive? 2 h

   b Dan drove 300 km . How many hours did he drive? 6 h

   c Linda drove 500 km . How many hours did she drive? 10 h

   d Jane drove 50 km . How many hours did she drive? 1 h

   e The Greens drove 200 km . How many hours did they drive? 4 h

2. Write in order from longest to shortest unit of time.

   day, second, year, minute, month, hour

   year , month , day , hour , minute , second

Compute.

	a	b	c
3.	7 m 42 cm + 26 m 36 cm 33 m 78 cm	7 cm 9 mm −2 cm 7 mm 5 cm 2 mm	4 cm 1 mm −1 cm 1 mm 3 cm
4.	5 km 86 m − 2 km 38 m 3 km 48 m	17 m 100 cm − 12 m 14 cm 5 m 86 cm	3 km 345 m +9 km 204 m 12 km 549 m

5. You are travelling along a highway at a speed of 100 km/h .

   How far would you go in 3 h ? 300 km

6. Driving down a city street you are travelling at a speed

   of 50 km/h . How far would you travel in 2 h ? 100 km

7. If you are travelling at a speed of 80 km/h, how far would

   you go in 1 h ? 80 km

1. Complete the chart.

×	10	20	30	40	50	60	70	80	90
1	10	20	30	40	50	60	70	80	90
2	20	40	60	80	100	120	140	160	180
3	30	60	90	120	150	180	210	240	270
4	40	80	120	160	200	240	280	320	360
5	50	100	150	200	250	300	350	400	450
6	60	120	180	240	300	360	420	480	540
7	70	140	210	280	350	420	490	560	630
8	80	160	240	320	400	480	560	640	720
9	90	180	270	360	450	540	630	720	810

Round the 2-digit number to the nearest ten.
Estimate the answer. Use > or < to complete the statement that follows.

a

2. 3 × 41 is about 3 × 40.

3 × 40 = 120

3 × 41 (>) 120

3. 6 × 19 is about 6 × 20.

6 × 20 = 120

6 × 19 (<) 120

4. 2 × 53 is about 2 × 50.

2 × 50 = 100

2 × 53 (>) 100

b

5 × 28 is about 5 × 30.

5 × 30 = 150

5 × 28 (<) 150

4 × 64 is about 4 × 60.

4 × 60 = 240

4 × 64 (>) 240

8 × 67 is about 8 × 70.

8 × 70 = 560

8 × 67 (<) 560

Estimate the product. Write it in the parentheses. Then find the exact answer.

	a	b	c	d
1.	27 × 3 = 81 (90)	41 × 6 = 246 (240)	53 × 4 = 212 (200)	28 × 8 = 224 (240)
2.	52 × 5 = 260 (250)	17 × 9 = 153 (180)	65 × 2 = 130 (140)	44 × 7 = 308 (280)
3.	57 × 7 = 399 (420)	43 × 8 = 344 (320)	92 × 3 = 276 (270)	58 × 9 = 522 (540)

Multiply.

	a	b	c	d	e
4.	47 × 4 = 188	52 × 7 = 364	61 × 5 = 305	98 × 2 = 196	75 × 8 = 600
5.	29 × 6 = 174	85 × 3 = 255	32 × 9 = 288	43 × 5 = 215	64 × 6 = 384
6.	68 × 9 = 612	18 × 4 = 72	74 × 2 = 148	69 × 8 = 552	78 × 7 = 546

Multiply.

①	②	③	④	⑤
38 × 6 = 228	62 × 4 = 248	49 × 9 = 441	36 × 7 = 252	87 × 5 = 435

Round the 3-digit number to the nearest hundred.
Estimate the answer. Use > or < to complete the statement that follows.

	a	b
1.	5 × 289 is about 5 × 300.	4 × 604 is about 4 × 600.
	5 × 300 = 1500	4 × 600 = 2400
	5 × 289 (<) 1500	4 × 604 (>) 2400
2.	7 × 465 is about 7 × 500.	6 × 184 is about 6 × 200.
	7 × 500 = 3500	6 × 200 = 1200
	7 × 465 (<) 3500	6 × 184 (<) 1200
3.	8 × 224 is about 8 × 200.	3 × 740 is about 3 × 700.
	8 × 200 = 1600	3 × 700 = 2100
	8 × 224 (>) 1600	3 × 740 (>) 2100

Complete each multiplication.

	a		b		c	
4.	247 × 3		358 × 7		247 × 5	
	21	(3 × 7)	56	(7 × 8)	35	(5 × 7)
	120	(3 × 40)	350	(7 × 50)	200	(5 × 40)
	600	(3 × 200)	2100	(7 × 300)	1000	(5 × 200)
	741		2506		1235	

Multiply.

	a	b	c	d
5.	628 × 5 = 3140	569 × 2 = 1138	118 × 4 = 472	426 × 6 = 2556
6.	314 × 4 = 1256	473 × 8 = 3784	241 × 3 = 723	163 × 9 = 1467

Complete.

	a	b	c
1.	3 × 12 = 36	5 × 14 = 70	8 × 32 = 256
	30 × 12 = 360	50 × 14 = 700	80 × 32 = 2560
2.	6 × 27 = 162	4 × 57 = 228	7 × 45 = 315
	60 × 27 = 1620	40 × 57 = 2280	70 × 45 = 3150

Multiply.

	a	b	c
3.	34 × 5 = 170 ; 34 × 50 = 1700	18 × 9 = 162 ; 18 × 90 = 1620	47 × 2 = 94 ; 47 × 20 = 940
4.	66 × 8 = 528 ; 66 × 80 = 5280	62 × 5 = 310 ; 62 × 50 = 3100	51 × 6 = 306 ; 51 × 60 = 3060

Write the products.

	a	b	c	d	e
5.	46 × 30 = 1380	57 × 50 = 2850	47 × 90 = 4230	61 × 40 = 2440	88 × 60 = 5280
6.	37 × 30 = 1110	69 × 70 = 4830	24 × 40 = 960	95 × 20 = 1900	55 × 50 = 2750
7.	42 × 23 = 966	57 × 38 = 2166	61 × 62 = 3782	32 × 97 = 3104	89 × 79 = 7031

Multiply.

① $8 \times 7 = 56$

② $5 \times 9 = 45$

③ $7 \times 6 = 42$

④ $9 \times 4 = 36$

⑤ $32 \times 3 = 96$

⑥ $46 \times 2 = 92$

⑦ $81 \times 9 = 729$

⑧ $523 \times 8 = 4184$

⑨ $176 \times 4 = 704$

⑩ $63 \times 13 = 819$

⑪ $27 \times 75 = 2025$

⑫ $86 \times 82 = 7052$

Jerry's dad had a sale table in his hardware store.
Jerry decided to find the sale value of the items on the table.

⑬ 35 small wrenches.
Each wrench was 43¢.
How much for wrenches? $15.05

⑭ 86 metal clamps.
Each clamp was 43¢.
How much for clamps? $36.98

⑮ 61 screwdrivers.
Each screwdriver was 30¢.
How much for screwdrivers? $18.30

⑯ 25 garden trowels.
Each trowel was 68¢.
How much for trowels? $17.00

⑰ 23 paintbrushes.
Each paintbrush was 79¢.
How much for paintbrushes? $18.17

⑱ 18 pairs of pliers.
Each pair of pliers was 39¢.
How much for the pliers? $7.02

⑲ Jerry added 47 screen hooks at 10¢ each. How much for screen hooks? $4.70

* How much was everything on the table worth? $117.22

Multiply.

	a	b	c	d	e
1.	35 × 57 = 1995	33 × 91 = 3003	52 × 74 = 3848	29 × 77 = 2233	21 × 52 = 1092
2.	81 × 36 = 2916	75 × 63 = 4725	52 × 76 = 3952	94 × 95 = 8930	55 × 58 = 3190
3.	89 × 47 = 4183	58 × 54 = 3132	55 × 73 = 4015	66 × 75 = 4950	28 × 55 = 1540

Find each partial product and the final product.

a

4.
$$\begin{array}{r} 245 \\ \times\ 23 \\ \hline 735 \\ 4900 \\ \hline 5635 \end{array}$$
(3 × 245)
(20 × 245)

b

$$\begin{array}{r} 786 \\ \times\ 45 \\ \hline 3930 \\ 31\,440 \\ \hline 35\,370 \end{array}$$
(5 × 786)
(40 × 786)

Multiply.

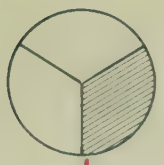
	a	b	c	d
5.	394 × 16 = 6304	568 × 37 = 21 016	192 × 58 = 11136	681 × 74 = 50 394

Find the products.

	a	b	c	d	e
1.	16 × 4 = 64	67 × 6 = 402	82 × 4 = 328	12 × 7 = 84	33 × 2 = 66
2.	73 × 8 = 584	51 × 5 = 255	86 × 9 = 774	70 × 3 = 210	96 × 7 = 672
3.	249 × 7 = 1743	872 × 3 = 2616	532 × 5 = 2660	516 × 2 = 1032	697 × 6 = 4182
4.	651 × 6 = 3906	347 × 3 = 1041	415 × 8 = 3320	309 × 9 = 2781	646 × 4 = 2584
5.	55 × 28 = 1540	18 × 59 = 1062	67 × 71 = 4757	75 × 48 = 3600	44 × 26 = 1144
6.	85 × 25 = 2125	68 × 46 = 3128	69 × 15 = 1035	75 × 27 = 2025	16 × 83 = 1328

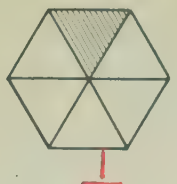
1. Write the fraction that names the shaded part.

a



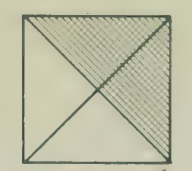
$\frac{1}{3}$

b



$\frac{1}{6}$

c



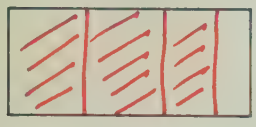
$\frac{2}{4}$ or $\frac{1}{2}$

d

$\frac{3}{5}$

2. Draw lines and shade parts in each region to show the fraction.

a



$\frac{3}{4}$

b

$\frac{1}{2}$

c

$\frac{2}{3}$

d

$\frac{1}{4}$

3. What fractional part of each set is shaded?

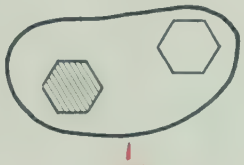
a

$\frac{2}{3}$

b

$\frac{5}{6}$

c



$\frac{1}{2}$

d

$\frac{5}{12}$

4. Shade parts in each region to show the fraction.

$\frac{1}{10}$ $\frac{5}{10}$ $\frac{1}{2}$ $\frac{9}{10}$ $\frac{2}{5}$ $\frac{6}{10}$ $\frac{4}{5}$

5. Underline the fraction that names the larger part of a region.

a

$\frac{2}{4}$ or $\frac{3}{4}$

b

$\frac{2}{5}$ or $\frac{4}{5}$

c

$\frac{7}{10}$ or $\frac{3}{10}$

d

$\frac{4}{10}$ or $\frac{1}{10}$

6. Use > or < to complete each statement.

a

$\frac{2}{5}$ < $\frac{3}{5}$

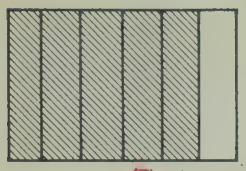
b

$\frac{3}{8}$ < $\frac{7}{8}$

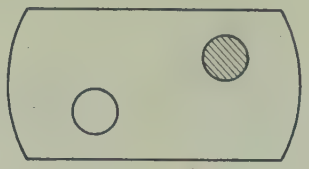
c

$\frac{5}{10}$ > $\frac{3}{10}$

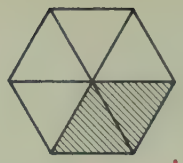
Write the fraction that names the shaded part.



① $\frac{5}{6}$



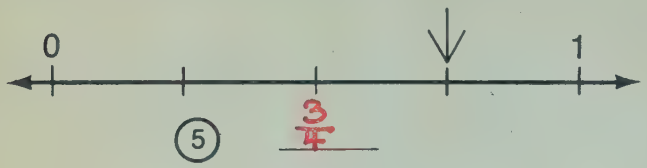
② $\frac{1}{2}$



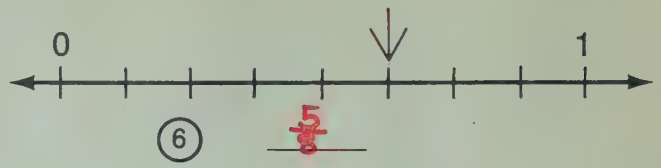
③ $\frac{2}{6}$ or $\frac{1}{3}$

④ $\frac{3}{5}$

Write the fraction that belongs at the point of the arrow.



⑤ $\frac{3}{4}$



⑥ $\frac{5}{8}$

Complete the pattern for each set of fractions. Write the missing numerators.

⑦ $\frac{0}{5}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{4}{5}$, $\frac{5}{5}$

⑧ $\frac{3}{10}$, $\frac{4}{10}$, $\frac{5}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, $\frac{8}{10}$, $\frac{9}{10}$, $\frac{10}{10}$

Write each set of fractions in order from largest to smallest.

⑨ $\frac{4}{10}$, $\frac{1}{10}$, $\frac{10}{10}$, $\frac{7}{10}$ $\frac{10}{10}$, $\frac{7}{10}$, $\frac{4}{10}$, $\frac{1}{10}$

⑩ $\frac{5}{9}$, $\frac{7}{9}$, $\frac{0}{9}$, $\frac{6}{9}$ $\frac{7}{9}$, $\frac{6}{9}$, $\frac{5}{9}$, $\frac{0}{9}$

⑪ Underline the fractions that are greater than $\frac{4}{6}$.

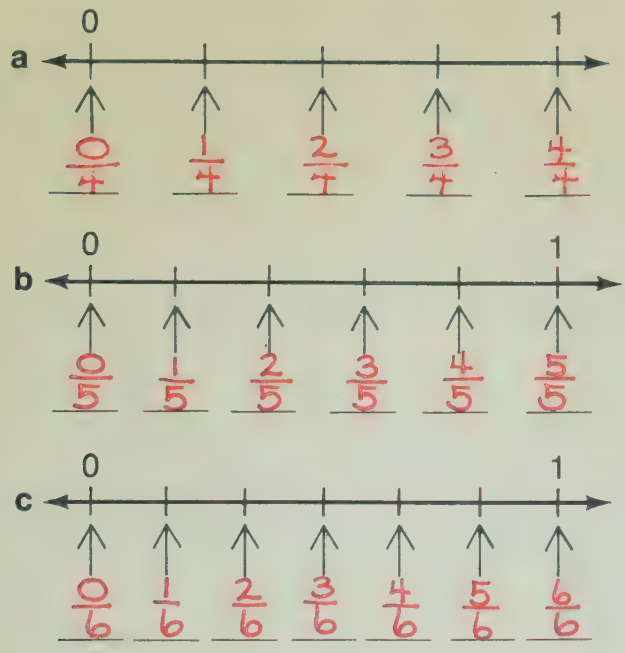
$\frac{0}{6}$, $\frac{1}{6}$, $\frac{2}{6}$, $\frac{3}{6}$, $\frac{4}{6}$, $\frac{5}{6}$, $\frac{6}{6}$

⑫ Ring the fractions in problem 11 that are less than $\frac{4}{6}$.

⑬ Underline the fractions between $\frac{3}{12}$ and $\frac{9}{12}$.

$\frac{9}{12}$, $\frac{3}{12}$, $\frac{5}{12}$, $\frac{11}{12}$, $\frac{1}{12}$, $\frac{4}{12}$, $\frac{2}{12}$, $\frac{7}{12}$, $\frac{8}{12}$, $\frac{10}{12}$, $\frac{6}{12}$

1. Write the fraction that names the point at each arrow.



Underline the greater fraction.

2. $\frac{3}{4}$ or $\frac{2}{4}$

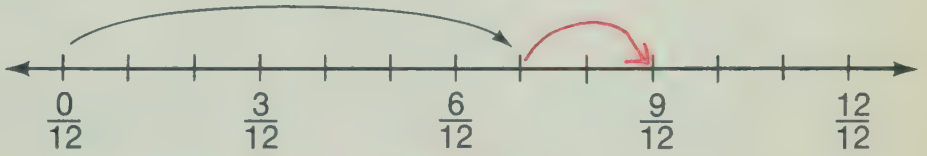
3. $\frac{3}{4}$ or $\frac{3}{5}$

4. $\frac{2}{5}$ or $\frac{5}{6}$

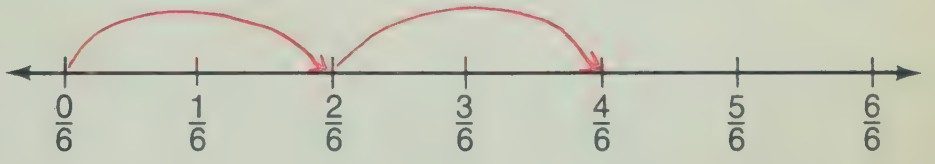
5. $\frac{2}{4}$ or $\frac{4}{6}$

Draw arrows to show the addition on the number line.

6. $\frac{7}{12} + \frac{2}{12} = \frac{9}{12}$



7. $\frac{2}{6} + \frac{2}{6} = \frac{4}{6}$



Complete each addition.

	a		b	
8.	$\frac{2}{4} + \frac{1}{4} = \frac{2+1}{4} = \frac{3}{4}$		$\frac{3}{8} + \frac{2}{8} = \frac{3+2}{8} = \frac{5}{8}$	
9.	$\frac{3}{6} + \frac{1}{6} = \frac{3+1}{6} = \frac{4}{6}$		$\frac{5}{9} + \frac{3}{9} = \frac{5+3}{9} = \frac{8}{9}$	

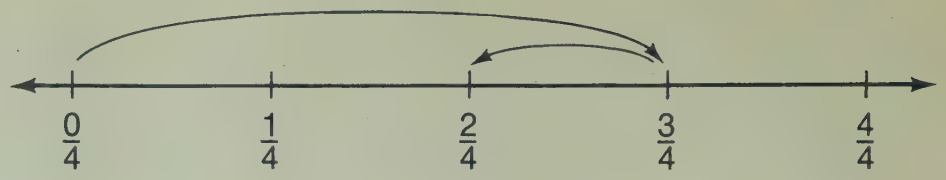
Add.

	a	b	c
10.	$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$	$\frac{3}{6} + \frac{1}{6} = \frac{4}{6}$	$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$
11.	$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$	$\frac{2}{9} + \frac{3}{9} = \frac{5}{9}$	$\frac{5}{8} + \frac{1}{8} = \frac{6}{8}$

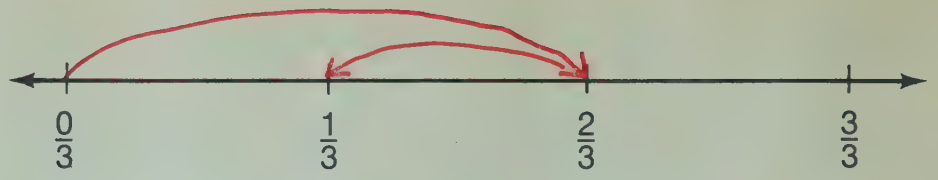
Draw arrows to show the subtraction on the number line.

Example

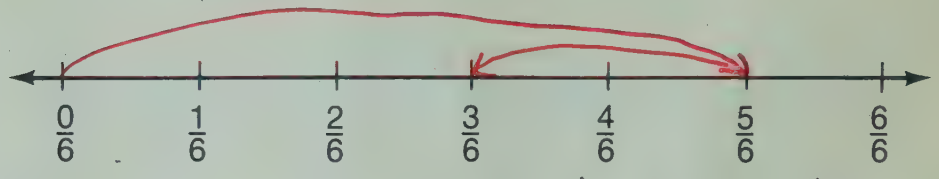
$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$



1. $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$



2. $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$



Complete each subtraction.

	a	b
3.	$\frac{3}{4} - \frac{2}{4} = \frac{3-2}{4} = \frac{1}{4}$	$\frac{5}{9} - \frac{3}{9} = \frac{5-3}{9} = \frac{2}{9}$
4.	$\frac{4}{7} - \frac{3}{7} = \frac{4-3}{7} = \frac{1}{7}$	$\frac{11}{12} - \frac{7}{12} = \frac{11-7}{12} = \frac{4}{12}$

Subtract.

	a	b	c
5.	$\frac{4}{9} - \frac{1}{9} = \frac{3}{9}$	$\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$	$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$
6.	$\frac{2}{4} - \frac{1}{4} = \frac{1}{4}$	$\frac{7}{8} - \frac{4}{8} = \frac{3}{8}$	$\frac{4}{6} - \frac{3}{6} = \frac{1}{6}$

Add.

① $\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$ ② $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$ ③ $\frac{4}{12} + \frac{5}{12} = \frac{9}{12}$

Subtract.

④ $\frac{4}{9} - \frac{1}{9} = \frac{3}{9}$ ⑤ $\frac{10}{10} - \frac{7}{10} = \frac{3}{10}$ ⑥ $\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$

Use >, <, or = to complete each statement.

	a	b	c
1.	$\frac{3}{4} + \frac{2}{4} \bigcirc \frac{4}{4}$ (>)	$\frac{5}{8} + \frac{1}{8} \bigcirc \frac{8}{8}$ (<)	$\frac{5}{8} + \frac{6}{8} \bigcirc \frac{8}{8}$ (>)
2.	$\frac{4}{5} + \frac{1}{5} \bigcirc \frac{5}{5}$ (=)	$\frac{1}{3} + \frac{2}{3} \bigcirc \frac{3}{3}$ (=)	$\frac{9}{12} + \frac{5}{12} \bigcirc \frac{12}{12}$ (>)
3.	$\frac{2}{6} + \frac{3}{6} \bigcirc \frac{6}{6}$ (<)	$\frac{9}{10} + \frac{3}{10} \bigcirc \frac{10}{10}$ (>)	$\frac{3}{9} + \frac{8}{9} \bigcirc \frac{9}{9}$ (>)

Add. Draw a ring around each answer that is greater than 1.

	a	b	c
4.	$\frac{3}{5} + \frac{3}{5} = \underline{\frac{6}{5}}$	$\frac{7}{8} + \frac{4}{8} = \underline{\frac{11}{8}}$	$\frac{1}{3} + \frac{1}{3} = \underline{\frac{2}{3}}$
5.	$\frac{3}{4} + \frac{3}{4} = \underline{\frac{6}{4}}$	$\frac{7}{12} + \frac{3}{12} = \underline{\frac{10}{12}}$	$\frac{3}{6} + \frac{4}{6} = \underline{\frac{7}{6}}$
6.	$\frac{2}{5} + \frac{4}{5} = \underline{\frac{6}{5}}$	$\frac{4}{6} + \frac{1}{6} = \underline{\frac{5}{6}}$	$\frac{7}{12} + \frac{8}{12} = \underline{\frac{15}{12}}$

Rename each fraction as a mixed number.

	a	b	c	d
7.	$\frac{4}{3} = \underline{1\frac{1}{3}}$	$\frac{9}{4} = \underline{2\frac{1}{4}}$	$\frac{7}{5} = \underline{1\frac{2}{5}}$	$\frac{13}{9} = \underline{1\frac{4}{9}}$
8.	$\frac{7}{3} = \underline{2\frac{1}{3}}$	$\frac{10}{9} = \underline{1\frac{1}{9}}$	$\frac{5}{2} = \underline{2\frac{1}{2}}$	$\frac{6}{5} = \underline{1\frac{1}{5}}$
9.	$\frac{11}{9} = \underline{1\frac{2}{9}}$	$\frac{17}{12} = \underline{1\frac{5}{12}}$	$\frac{13}{6} = \underline{2\frac{1}{6}}$	$\frac{10}{3} = \underline{3\frac{1}{3}}$

Add. Rename each sum as a mixed number.

	a	b	c
10.	$\frac{3}{4} + \frac{2}{4} = \underline{\frac{5}{4}} = \underline{1\frac{1}{4}}$	$\frac{2}{5} + \frac{4}{5} = \underline{\frac{6}{5}} = \underline{1\frac{1}{5}}$	$\frac{6}{8} + \frac{5}{8} = \underline{\frac{11}{8}} = \underline{1\frac{3}{8}}$
11.	$\frac{3}{4} + \frac{3}{4} = \underline{\frac{6}{4}} = \underline{1\frac{2}{4}}$	$\frac{5}{8} + \frac{5}{8} = \underline{\frac{10}{8}} = \underline{1\frac{2}{8}}$	$\frac{7}{9} + \frac{4}{9} = \underline{\frac{11}{9}} = \underline{1\frac{2}{9}}$
12.	$\frac{5}{6} + \frac{5}{6} = \underline{\frac{10}{6}} = \underline{1\frac{4}{6}}$	$\frac{3}{7} + \frac{5}{7} = \underline{\frac{8}{7}} = \underline{1\frac{1}{7}}$	$\frac{7}{10} + \frac{9}{10} = \underline{\frac{16}{10}} = \underline{1\frac{6}{10}}$

Underline the greater fraction in each pair.

	a	b	c	d
1.	$\frac{3}{3}$ or $\frac{1}{3}$	$\frac{3}{5}$ or $\frac{4}{5}$	$\frac{6}{8}$ or $\frac{5}{8}$	$\frac{3}{6}$ or $\frac{5}{6}$
2.	$\frac{7}{12}$ or $\frac{6}{12}$	$\frac{2}{4}$ or $\frac{1}{4}$	$\frac{9}{10}$ or $\frac{8}{10}$	$\frac{7}{9}$ or $\frac{9}{9}$

3. Write the fractions in order from smallest to largest.

$\frac{3}{6}, \frac{5}{6}, \frac{1}{6}, \frac{0}{6}, \frac{6}{6}, \frac{4}{6}, \frac{2}{6}$ $\frac{0}{6}, \frac{1}{6}, \frac{2}{6}, \frac{3}{6}, \frac{4}{6}, \frac{5}{6}, \frac{6}{6}$

Add.

	a	b	c	d
4.	$\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$	$\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$	$\frac{5}{9} + \frac{1}{9} = \frac{6}{9}$	$\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$
5.	$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$	$\frac{7}{12} + \frac{2}{12} = \frac{9}{12}$	$\frac{5}{10} + \frac{3}{10} = \frac{8}{10}$	$\frac{1}{3} + \frac{2}{3} = \frac{3}{3}$

Subtract.

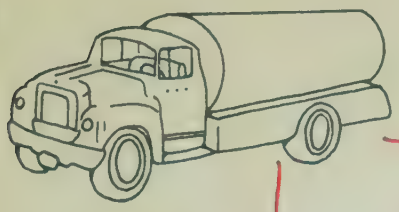
	a	b	c	d
6.	$\frac{3}{6} - \frac{1}{6} = \frac{2}{6}$	$\frac{5}{8} - \frac{4}{8} = \frac{1}{8}$	$\frac{7}{9} - \frac{4}{9} = \frac{3}{9}$	$\frac{3}{3} - \frac{2}{3} = \frac{1}{3}$
7.	$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$	$\frac{4}{5} - \frac{4}{5} = \frac{0}{5}$	$\frac{3}{12} - \frac{2}{12} = \frac{1}{12}$	$\frac{10}{10} - \frac{8}{10} = \frac{2}{10}$

Underline the greater fraction in each pair.

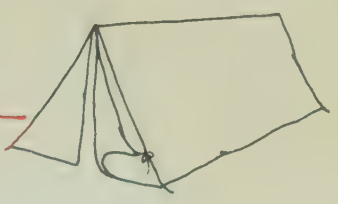
	a	b	c	d
8.	$\frac{1}{3}$ or $\frac{1}{9}$	$\frac{1}{2}$ or $\frac{1}{6}$	$\frac{1}{4}$ or $\frac{1}{8}$	$\frac{1}{6}$ or $\frac{1}{12}$
9.	$\frac{1}{10}$ or $\frac{1}{5}$	$\frac{1}{12}$ or $\frac{1}{4}$	$\frac{1}{6}$ or $\frac{1}{4}$	$\frac{1}{6}$ or $\frac{1}{9}$

1. Match the pictures and the figures.
Some objects may match more than one figure.

a

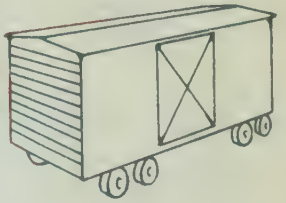


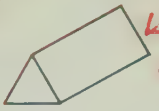
b

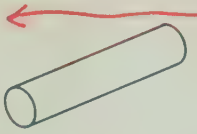


c

d

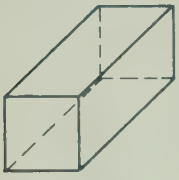






2. The figures below are *prisms*, *cylinders*, and *cones*.
Identify each by writing its correct name.

a

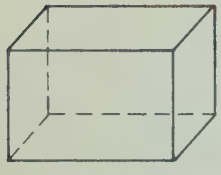


Prism

b

Cylinder

c



Prism

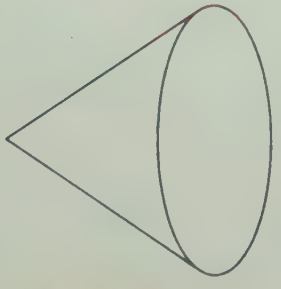
d

Cone

e

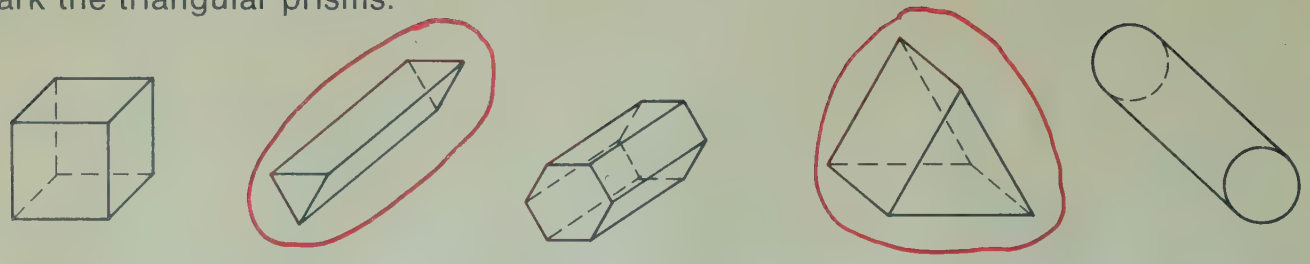
Cylinder

f



Cone

Mark the triangular prisms.



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(1) Why is **a** a triangular prism?

5 faces, ends are congruent triangles.

(2) Why is **b** not a triangular prism?

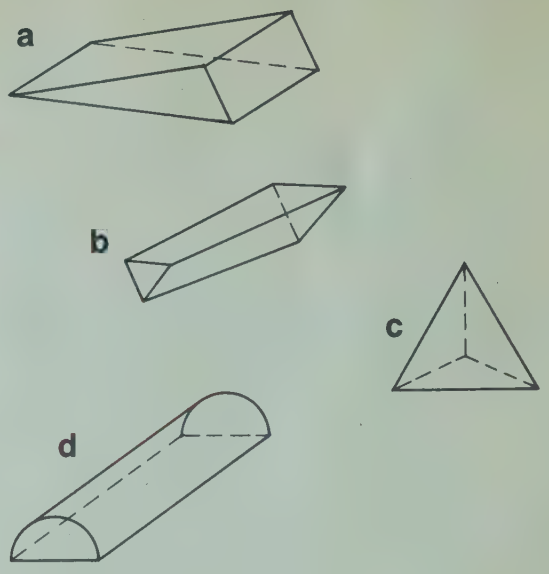
Triangular ends are not congruent.

(3) Why is **c** not a triangular prism?

It only has 4 faces.

(4) Why is **d** not a triangular prism?

The ends are semicircles; has a curved surface.



(5) Name three features all triangular prisms have.

a It has 5 faces.

b The ends are congruent triangles.

c All parts of the triangular ends are the same distance apart.

(6) Why do you think most rooms are not shaped like a triangular prism?

It would be difficult to make furniture fit and difficult to build. The walls would be slanted.

What would be some advantages and disadvantages of a room shaped like a cone?

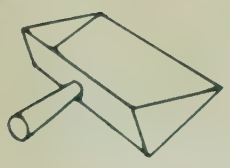
Advantages	Disadvantages
Interesting	Less room—no corners
High-pointed ceiling—great for a chandelier	Hard to hang pictures as walls slant
	Wastes space in a building

Use these names to identify the figures on this page.

rectangular prism	cylinder	sphere
triangular prism	pyramid	cone

1. Write the name of the geometric solid that best describes the shape of each object.

a

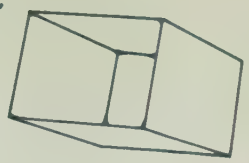


Triangular prism

b

Cone

c



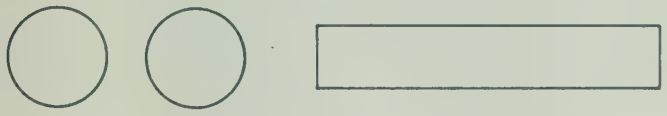
Rectangular prism

d

Cylinder

2. Write the name of the solid that could be constructed with each set of surfaces.

a

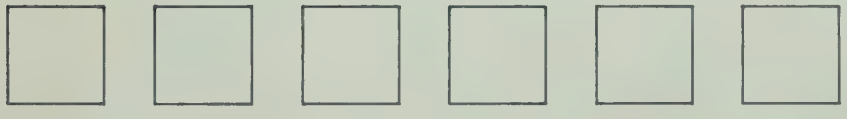


Cylinder

b

Cone

c



Rectangular prism

d

Triangular prism

3. a How many edges does a triangular prism have? 9 How many vertices? 6

b How many edges does a cylinder have? 2 How many faces? 2

c How many edges does a rectangular prism have? 12 How many vertices? 8

Round each number.
Add to get an estimate and add to get the exact answer.

	a		b		c	
1.	71	70	79	80	99	100
	+ 88	+ 90	+ 82	+ 80	+ 56	+ 60
	159	160	161	160	155	160
2.	75	80	56	60	39	40
	+ 14	+ 10	+ 21	+ 20	+ 13	+ 10
	89	90	77	80	52	50
3.	510	500	295	300	149	100
	+ 121	+ 100	+ 665	+ 700	+ 270	+ 300
	631	600	960	1000	419	400

Find the exact sums.

	a	b	c	d	e	f
4.	90	97	65	18	75	19
	+ 18	+ 53	+ 54	+ 53	+ 80	+ 72
	108	150	119	71	155	91
5.	46	22	87	23	40	77
	+ 36	+ 25	+ 55	+ 79	+ 98	+ 86
	82	47	142	102	138	163

Add.

	a	b	c	d	e
6.	788	566	273	906	799
	+ 882	+ 437	+ 305	+ 594	+ 793
	1670	1003	578	1500	1592
7.	995	718	720	833	919
	+ 342	+ 773	+ 920	+ 354	+ 732
	1337	1491	1640	1187	1651

Round each number to the nearest thousand.
Find the estimated sum and the exact sum.

	a		b		c	
1.	3670	4000	5021	5000	9644	10000
	+ 9197	+ 9000	+ 6253	+ 6000	+ 5007	+ 5000
	12867	13000	11274	11000	14651	15000
2.	7189	7000	9630	10000	6775	7000
	+ 5846	+ 6000	+ 6222	+ 6000	+ 1978	+ 2000
	13035	13000	15852	16000	8753	9000

Write the estimated sum above each problem.
Then compute the exact sum.

	a	b	c	d	e
3.	15000	8000	11000	10000	6000
	5762	3074	8296	6876	3854
	+ 9166	+ 5236	+ 2972	+ 2878	+ 1822
	14928	8310	11268	9754	5676
4.	10000	9000	6000	5000	15000
	2785	3318	1968	2791	8651
	+ 7221	+ 5674	+ 3531	+ 2023	+ 6494
	10006	8992	5499	4814	15145
5.	11000	18000	8000	5000	14000
	8450	8682	6778	3121	8751
	+ 3022	+ 9012	+ 1034	+ 1847	+ 5043
	11472	17694	7812	4968	13794
6.	11000	4000	13000	14000	5000
	6354	1049	6572	9583	2317
	+ 5371	+ 3344	+ 6267	+ 4227	+ 3426
	11725	4393	12839	13810	5743

Round each number to the nearest hundred.
Find the estimated sum and the exact sum.

	a		b		c	
1.	343	300	660	700	752	800
	709	700	670	700	115	100
	+ 852	+ 900	+ 511	+ 500	+ 471	+ 500
	1904	1900	1841	1900	1338	1400
2.	192	200	2396	2400	590	600
	676	700	668	700	791	800
	492	500	4243	4200	171	200
	+ 318	+ 300	+ 117	+ 100	+ 404	+ 400
	1678	1700	7424	7400	1956	2000

Write the estimated sum above each problem.
Then compute the exact sum.

	a	b	c	d	e
3.	1600	1900	2100	2500	2800
	305	350	883	577	840
	431	833	471	415	460
	+ 868	+ 732	263	752	881
	1604	1915	+ 435	+ 701	+ 627
			2052	2445	2808
4.	24 000	10 000	21 000	15 000	23 000
	8514	2796	7301	9105	9315
	9213	1572	8596	3124	8326
	+ 6420	+ 5390	+ 4681	+ 2573	+ 6030
	24 147	9758	20 578	14 802	23 671

Round each number to the nearest hundred. Estimate the sum.

5. 134 + 779 + 538 + 419 + 756 + 248 + 379 3200

Round each number.
Subtract to get an estimate and subtract to get the exact answer.

	a		b		c	
1.	88	90	54	50	65	70
	− 46	− 50	− 20	− 20	− 37	− 40
	42	40	34	30	28	30
2.	864	900	920	900	851	900
	− 296	− 300	− 723	− 700	− 491	− 500
	568	600	197	200	360	400
3.	899	900	973	1000	740	700
	− 614	− 600	− 356	− 400	− 242	− 200
	285	300	617	600	498	500

Find the exact difference.

	a	b	c	d	e	f
4.	62	18	69	70	66	85
	− 13	− 11	− 10	− 39	− 58	− 77
	49	7	59	31	8	8
5.	96	42	50	60	82	34
	− 81	− 22	− 26	− 10	− 49	− 23
	15	20	24	50	33	11

Subtract.

	a	b	c	d	e
6.	523	811	678	593	261
	− 322	− 282	− 553	− 298	− 202
	201	529	125	295	59
7.	644	845	611	647	883
	− 551	− 105	− 347	− 201	− 214
	93	740	264	446	669

Round each number.
Subtract to get an estimate and subtract to get the exact answer.

	a		b		c	
1.	5687	5700	8712	9000	9259	9300
	− 574	− 600	− 7869	− 8000	− 723	− 700
	5113	5100	843	1000	8536	8600
2.	7048	7000	9250	9000	7560	7600
	− 78	− 100	− 7396	− 7000	− 69	− 100
	6970	6900	1854	2000	7491	7500

Write the estimated difference above each problem.
Then compute the exact difference.

	a	b	c	d	e
3.	3000	7000	8000	9200	4000
	3724	7766	8064	9452	4075
	− 1261	− 960	− 65	− 274	− 79
	2463	6806	7999	9178	3996
4.	5300	6700	9100	6900	3000
	5447	7198	9102	7120	7247
	− 82	− 528	− 22	− 211	− 3921
	5365	6670	9080	6909	3326
5.	5500	7700	8700	6500	8500
	6439	8382	9238	7358	9429
	− 938	− 667	− 488	− 895	− 856
	5501	7715	8750	6463	8573
6.	3700	1000	1400	9000	600
	3832	4781	2397	9077	2601
	− 98	− 3701	− 988	− 80	− 2016
	3734	1080	1409	8997	585

Complete.

1.

a	b	c
65 × 2	71 × 3	64 × 6
10 (2 × 5)	3 (3 × 1)	24 (6 × 4)
120 (2 × 60)	210 (3 × 70)	360 (6 × 60)
130	213	384

2.

a	b	c
56 × 9	55 × 5	88 × 8
54 (9 × 6)	25 (5 × 5)	64 (8 × 8)
450 (9 × 50)	250 (5 × 50)	640 (8 × 80)
504	275	704

Multiply.

	a	b	c	d
3.	46 × 7 = 322	63 × 4 = 252	92 × 6 = 552	77 × 3 = 231
4.	742 × 9 = 6678	445 × 6 = 2670	182 × 5 = 910	687 × 4 = 2748
5.	548 × 2 = 1096	646 × 4 = 2584	338 × 2 = 676	439 × 8 = 3512
6.	558 × 7 = 3906	489 × 6 = 2934	251 × 3 = 753	673 × 5 = 3365

Complete.

	a		b		c	
1.	26 × 30		71 × 10		58 × 60	
	180	(30 × 6)	10	(10 × 1)	480	(60 × 8)
	600	(30 × 20)	700	(10 × 70)	3000	(60 × 50)
	780		710		3480	
2.	45 × 20		93 × 40		45 × 50	
	100	(20 × 5)	120	(40 × 3)	250	(50 × 5)
	800	(20 × 40)	3600	(40 × 90)	2000	(50 × 40)
	900		3720		2250	

Multiply. Use the shortcut if you wish.

	a	b	c	d	e
3.	59 × 30 = 1770	84 × 70 = 5880	26 × 80 = 2080	84 × 20 = 1680	23 × 40 = 920
4.	11 × 80 = 880	48 × 70 = 3360	86 × 20 = 1720	49 × 10 = 490	93 × 50 = 4650
5.	183 × 40 = 7320	413 × 90 = 37170	795 × 20 = 15900	826 × 20 = 16520	251 × 50 = 12550
6.	368 × 60 = 22080	499 × 40 = 19960	547 × 10 = 5470	919 × 40 = 36760	649 × 80 = 51920
7.	783 × 80 = 62640	471 × 60 = 28260	985 × 90 = 88650	739 × 60 = 44340	838 × 50 = 41900

Round each number. Find the estimated product and the exact product.

	a	b	c
1.	81 → 80 × 26 → 30 2106 2400	14 → 10 × 92 → 90 1288 900	36 → 40 × 52 → 50 1872 2000
2.	98 → 100 × 42 → 40 4116 4000	13 → 10 × 35 → 40 455 400	19 → 20 × 38 → 40 722 800

Multiply.

	a	b	c	d	e
3.	43 × 91 3913	59 × 73 4307	68 × 87 5916	17 × 78 1326	56 × 41 2296
4.	23 × 11 253	74 × 78 5772	98 × 41 4018	76 × 24 1824	45 × 51 2295
5.	37 × 10 370	53 × 50 2650	65 × 80 5200	89 × 50 4450	67 × 60 4020

Complete.

	a	b	c
1.	118 × 36	823 × 38	270 × 48
	708 (6 × 118)	6 584 (8 × 823)	2 160 (8 × 270)
	3540 (30 × 118)	24 690 (30 × 823)	10 800 (40 × 270)
	4248	31 274	12 960

Multiply.

	a	b	c	d
2.	651 × 38 = 24 738	375 × 21 = 7875	820 × 27 = 22 140	790 × 32 = 25 280
3.	282 × 94 = 26 508	594 × 45 = 26 730	465 × 23 = 10 695	543 × 72 = 39 096
4.	352 × 64 = 22 528	867 × 67 = 58 089	927 × 34 = 31 518	645 × 61 = 39 345
5.	678 × 44 = 29 832	534 × 53 = 28 302	252 × 75 = 18 900	186 × 13 = 2418

Look for the easy way to multiply these numbers.

a $2 \times 9 \times 5 =$ 90

b $5 \times 7 \times 20 =$ 700

c $2 \times 8 \times 2 =$ 32

d $2 \times 6 \times 50 =$ 600

e $4 \times 7 \times 3 =$ 84

f $25 \times 3 \times 8 =$ 600

Add.

1.
$$\begin{array}{r} 688 \\ +\ 362 \\ \hline 1050 \end{array}$$

2.
$$\begin{array}{r} 1986 \\ +\ 9248 \\ \hline 11\,234 \end{array}$$

3.
$$\begin{array}{r} 76 \\ 3142 \\ 942 \\ +\ 4337 \\ \hline 8497 \end{array}$$

Subtract.

a

4.
$$\begin{array}{r} 800 \\ -\ 439 \\ \hline 361 \end{array}$$

b
$$\begin{array}{r} 4075 \\ -\ 379 \\ \hline 3696 \end{array}$$

Multiply.

5.
$$\begin{array}{r} 186 \\ \times\ 3 \\ \hline 558 \end{array}$$

6.
$$\begin{array}{r} 812 \\ \times\ 40 \\ \hline 32\,480 \end{array}$$

7.
$$\begin{array}{r} 32 \\ \times\ 91 \\ \hline 2912 \end{array}$$

8.
$$\begin{array}{r} 398 \\ \times\ 81 \\ \hline 32\,238 \end{array}$$

9. 51×45 has the same product as 45×51. What is that product? 2295

10. Make the multiplication easy. Select the two numbers you multiply first.

$4 \times 12 \times 25 =$ 1200

Complete.

	a	b	c
1.	2 × 5 = 10	6 × 8 = 48	5 × 7 = 35
2.	9 × 4 = 36	6 × 7 = 42	9 × 7 = 63
3.	3 × 6 = 18	8 × 2 = 16	5 × 6 = 30
4.	7 × 5 = 35	2 × 7 = 14	2 × 4 = 8
5.	6 × 4 = 24	5 × 3 = 15	9 × 3 = 27
6.	9 × 8 = 72	1 × 3 = 3	8 × 6 = 48

Find the largest number that will complete each sentence.

	a	b	c
7.	4 × 3 < 14	4 × 5 < 21	4 × 4 < 19
8.	0 × 9 < 2	9 × 3 < 30	5 × 6 < 33
9.	3 × 6 < 20	8 × 6 < 54	8 × 7 < 63

Answer each question.

	a	b
10.	How many 4s in 48? 12	How many 5s in 65? 13
11.	How many 7s in 98? 14	How many 4s in 96? 24
12.	How many 6s in 96? 16	How many 2s in 62? 31
13.	How many 3s in 84? 28	How many 9s in 90? 10
14.	How many 8s in 88? 11	How many 5s in 70? 14

Complete.

	a	b	c
15.	10 × 5 = 50	40 × 2 = 80	200 × 3 = 600
16.	300 twos = 600	10 × 9 = 90	30 fours = 120
17.	500 × 4 = 2000	600 × 6 = 3600	800 fives = 4000
18.	60 × 7 = 420	90 × 8 = 720	70 fours = 280
19.	50 threes = 150	700 twos = 1400	80 × 5 = 400

Use subtraction to find the answers.

a

1. How many 7s in 238?

238
− 140 — 20 sevens
98
− 70 — 10 sevens
28
− 28 — 4 sevens
0

How many sevens? 34

b

How many 5s in 215?

215
− 100 — 20 fives
115
− 100 — 20 fives
15
− 15 — 3 fives
0

How many fives? 43

2. How many 4s in 92? 23

92
−80 20 fours
12
−12 3 fours
0

How many 6s in 270? 45

270
−180 30 sixes
90
−60 10 sixes
30
−30 5 sixes
0

3. How many 3s in 228? 76

228
−150 50 threes
78
−60 20 threes
18
−18 6 threes
0

How many 8s in 248? 31

248
−160 20 eights
88
−80 10 eights
8
−8 1 eight
0

4. How many 9s in 615? 68 R3

615
−270 30 nines
345
−270 30 nines
75
−72 8 nines
3

How many 2s in 146? 73

146
−100 50 twos
46
−40 20 twos
6
−6 3 twos
0

Underline the number closest to the exact answer.

1. How many 4s in 131?	20	30	40
2. How many 8s in 171?	20	30	40
3. How many 5s in 124?	20	30	40
4. How many 7s in 436?	40	50	60
5. How many 6s in 347?	40	50	60
6. How many 5s in 361?	50	60	70
7. How many 4s in 166?	30	40	50
8. How many 7s in 648?	70	80	90
9. How many 9s in 812?	70	80	90
10. How many 4s in 133?	30	40	50

Between what multiples of 10 is each answer?

a	b
11. How many 3s in 224?	How many 7s in 326?
Between 70 and 80	Between 40 and 50
12. How many 5s in 283?	How many 8s in 113?
Between 50 and 60	Between 10 and 20
13. How many 6s in 212?	How many 4s in 171?
Between 30 and 40	Between 40 and 50
14. How many 9s in 734?	How many 2s in 117?
Between 80 and 90	Between 50 and 60
15. How many 5s in 172?	How many 9s in 713?
Between 30 and 40	Between 70 and 80
16. How many 8s in 642?	How many 6s in 227?
Between 80 and 90	Between 30 and 40

Divide.

	a	b	c
1.	$4\overline{)96}$ 20 80	$7\overline{)123}$ 10 70	$5\overline{)133}$ 20 100

Estimate the quotient. Underline the nearest estimate.

2. About how many 2s in 259?	100	200	300
3. About how many 3s in 725?	100	200	300
4. About how many 4s in 797?	100	200	300

Between what multiples of 10 or 100 is each answer?

① About how many 6s in 394?
Between 60 and 70

② About how many 4s in 221?
Between 50 and 60

③ About how many 8s in 319?
Between 30 and 40

④ About how many 9s in 731?
Between 80 and 90

⑤ About how many 2s in 513?
Between 200 and 300

⑥ About how many 8s in 995?
Between 100 and 200

⑦ About how many 4s in 797?
Between 100 and 200

⑧ About how many 2s in 755?
Between 300 and 400

⑨ About how many 5s in 744?
Between 100 and 200

⑩ About how many 3s in 514?
Between 100 and 200

Write your estimate in the parentheses. Then compute.

a **b** **c**

1.

a. (100) 139 R 6
9
30
100
6)834
600
234
180
54
54
0

b. (200) 242 R1
2
40
200
3)727
600
127
120
7
6
1

c. (100) 147 R5
7
40
100
6)887
600
287
240
47
42
5

2.

a. (80) 89 R3
9
80
4)359
320
39
36
3

b. (60) 64 R6
4
60
7)454
420
34
28
6

c. (100) 147 R2
7
40
100
5)737
500
237
200
37
35
2

3.

a. (200) 285 R2
5
80
200
3)857
600
257
240
17
15
2

b. (100) 125 R5
5
20
100
6)755
600
155
120
35
30
5

c. (100) 119 R2
9
10
100
8)954
800
154
80
74
72
2

Divide.

① $5\overline{)420}$ = 84

② $4\overline{)973}$ = 243 R1

③ $9\overline{)945}$ = 105

④ $7\overline{)819}$ = 117

⑤ $6\overline{)598}$ = 99 R4

⑥ $8\overline{)214}$ = 26 R6

⑦ $3\overline{)454}$ = 151 R1

⑧ $5\overline{)870}$ = 174

⑨ $2\overline{)935}$ = 467 R1

⑩ $6\overline{)942}$ = 157

⑪ $7\overline{)666}$ = 95 R1

⑫ $4\overline{)196}$ = 49

1. Estimate. Do not compute.

a How many 4s in 40? 10 in 200? 50

in 400? 100 in 485? 120

b How many 6s in 120? 20 in 360? 60

in 600? 100 in 720? 120

c How many 8s in 800? 100 in 640? 80

in 400? 50 in 480? 60

d How many 3s in 30? 10 in 300? 100

in 360? 120 in 450? 150

2. Underline the better buy.

a 2 for 25¢ or 15¢ each

b 4 for 79¢ or 15¢ each

c 6 for 35¢ or 5¢ each

d 3 for 33¢ or 5 for 49¢

3. Divide.

a $5\overline{)345}$ = 69

b $7\overline{)154}$ = 22

c $6\overline{)437}$ = 72 R5

d $4\overline{)969}$ = 242 R1

NAME _____

(1) Write ten sentences using one word, number, or symbol from each column.

500	>	6	about	fun
3	+	has	=	5
Math	×	4	lunch	day
n	is	when	good	numbers
60	sentences	2	>	11
Today	each	8	sometimes	1000
Word	÷	tell	be	comes
18	may	is	×	12
Each	work	may	<	3
We	day	9	÷	9
Sentences	=	3	≠	false
7	−	a	some	good

a 500 > 6 × 12

b 3 + 2 = 5

c Math sentences tell about numbers.

d n ÷ 2 < 12

e 60 > 8 × 5

f Today is a good day.

g Word sentences may be false.

h 18 ÷ 6 < 11

i We may tell about numbers.

j 7 − 3 ≠ 1000

(2) Do your sentences all give a complete idea? Yes

(3) Are your sentences all true? Answers will vary.

(4) Does each math sentence have a relation symbol? Yes

1. Here are some numbers: 4, 6, 8, 10, 12, 14, 16, 18.

Write the numbers from this set that can be used to make each sentence true.

a $7 < \square$	8	10	12	14	16	18	
b $\square > 4$	6	8	10	12	14	16	18
c $12 - 4 = \square$	8						
d $3 + 9 \neq \square$	4	6	8	10	14	16	18
e $\square > 5$	6	8	10	12	14	16	18

After each sentence write T if it is true, F if false, or O if open.

	a	**b**	**c**
2.	$3 + 4 = 7$ T	$7 > 2 + 3$ T	$21 \div 3 = 7$ T
3.	$4 \times n = 12$ O	$n \div 9 = 9$ O	$2 + 7 = 8$ F
4.	$16 \times 43 = 43 \times 16$ T	$21 > 4 \times 5$ T	$12 > k$ O

Use $>$, $<$, or $=$ to make each sentence true.

	a	**b**	**c**
5.	$36 \; (=) \; 4 \times 9$	$85 \; (>) \; 9 \times 9$	$27 \div 3 \; (<) \; 10$
6.	$17 - 5 \; (<) \; 2 \times 7$	$10 \times 10 \; (=) \; 4 \times 25$	$45 \; (>) \; 4 \times 10$

Use T, F, or O to tell whether each sentence is true, false, or open.

(1) $4 \times 9 = 32$ F

(2) $24 \div 3 = 4 \times 2$ T

(3) $16 \times n = 32$ O

(4) $27 > 5 \times 5$ T

(5) $37 - 12 = 5 \times 5$ T

(6) $64 = 9 \times 8$ F

Rewrite each open sentence as a true sentence.

(7) $18 + b = 25$ 18+7=25

(8) $36 - n = 20$ 36-16=20

(9) $8 + n = 17$ 8+9=17

(10) $4 + 3 + a = 9$ 4+3+2=9

(11) $5 \times c = 500$ 5×100=500

(12) $24 \div s = 8$ 24÷3=8

You have studied several types of sentences.
Write three of each type. Answers will vary.

(1) An equality contains the relation symbol = .
Write three equalities.

a 2×10=4×5
b 24÷6=4
c 100×100=10×10×10×10

(2) An inequality contains any one of the relation symbols >, <, or ≠.
Write three inequalities.

a 15>14
b 63÷7≠10
c 9×3<28

(3) A true sentence is mathematically correct.
Write three true sentences.

a 9-6=3
b 14+2>15
c 200÷10≠21

(4) A false sentence is mathematically incorrect.
Write three false sentences.

a 19÷2=9
b 41×3≠123
c 5×4>20

(5) An open sentence contains a placeholder.
It is neither true nor false.
Write three open sentences.

a x+10=20
b n÷6>7
c t<15

After each sentence write T if it is true, F if false, or O if open.

1. a $100 \div 10 = 10$ T

b $\frac{1}{6} < \frac{1}{4}$ T

c $\frac{2}{5} \times \frac{1}{5} = \frac{3}{10}$ F

d $125 \div 5 = n$ O
$125 \div 5 = 25$

e $18 > 8 \times 2$ T

f $1468 \times 7 = n$ O
$1468 \times 7 = 10\,276$

g $8 + n = 11$ O
$8 + 3 = 11$

h $\frac{7}{12} - \frac{2}{12} = \frac{5}{12}$ T

i $54 \div 9 = 3 \times n$ O
$54 \div 9 = 3 \times 2$

j $3 - n > 1$ O
$3 - 1 > 1$ or
$3 - 0 > 1$

2. Under each open sentence in problem 1 write the sentence as a true sentence.

Find the answer to each problem.
For each problem write a true math sentence to back up your answer.

3. a He took the bus 6 times.
Each trip was 15¢.
How much in all? 90¢

$6 \times 15¢ = 90¢$

b His allowance was $2.50.
He spent 90¢ on a taxi.
How much was left? $1.60

$\$2.50 - \$0.90 = \$1.60$

4. a Mary rode the bus 9 times
each week. Each trip was 15¢.
How much bus fare each week? $1.35

$9 \times \$0.15 = \$1.35$

b How much did she
spend for the bus in 4 weeks? $5.40

$4 \times \$1.35 = \$5.40$

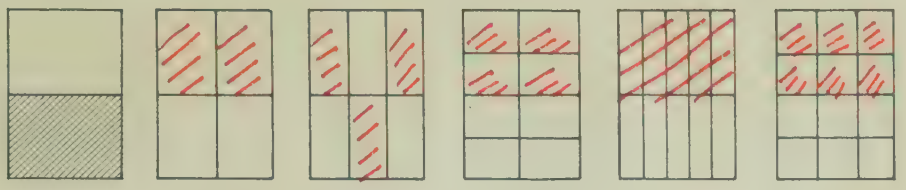
5. a Mary's allowance was
$2.75 each week.
What was her allowance
in 4 weeks? $11.00

$\$2.75 \times 4 = \$11.00$

b Mary had $5.60 left after
bus fare for 4 weeks.
How much was left for each week?
$1.40

$\$5.60 \div 4 = \$1.40$

1. Shade each region to show the fraction.



Number of parts shaded → Total number of parts

$\frac{1}{2}$ $\frac{2}{4}$ $\frac{3}{6}$ $\frac{4}{8}$ $\frac{5}{10}$ $\frac{6}{12}$

Show another name for each fraction.

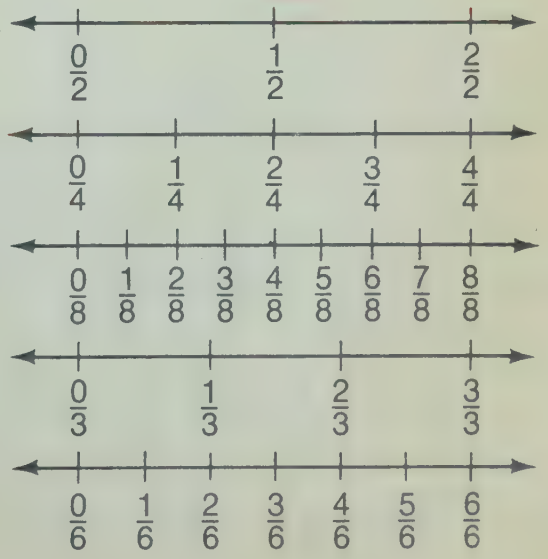
	a	b	c	d
2.	$\frac{1}{2} = \frac{2}{4}$	$\frac{3}{6} = \frac{6}{12}$	$\frac{1}{2} = \frac{5}{10}$	$\frac{2}{4} = \frac{4}{8}$
3.	$\frac{1}{2} = \frac{3}{6}$	$\frac{2}{4} = \frac{6}{12}$	$\frac{1}{2} = \frac{6}{12}$	$\frac{1}{2} = \frac{8}{16}$

Underline the greater fraction.

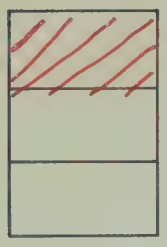
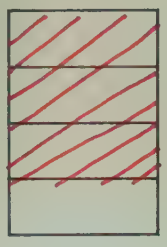
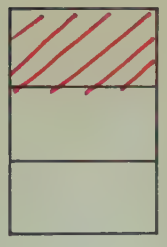
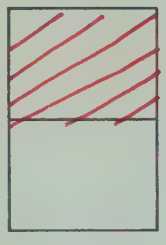
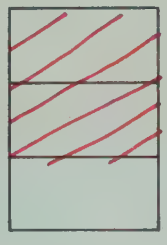
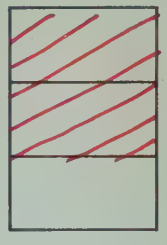
	a	b	c	d
4.	$\underline{\frac{1}{2}}$ or $\frac{1}{3}$	$\frac{3}{5}$ or $\underline{\frac{3}{4}}$	$\frac{1}{12}$ or $\underline{\frac{1}{2}}$	$\frac{1}{4}$ or $\underline{\frac{1}{3}}$
5.	$\underline{\frac{3}{6}}$ or $\frac{1}{6}$	$\frac{1}{4}$ or $\underline{\frac{3}{4}}$	$\underline{\frac{3}{9}}$ or $\frac{2}{9}$	$\frac{3}{8}$ or $\underline{\frac{5}{8}}$

Complete to make each sentence true.
The number lines may help.

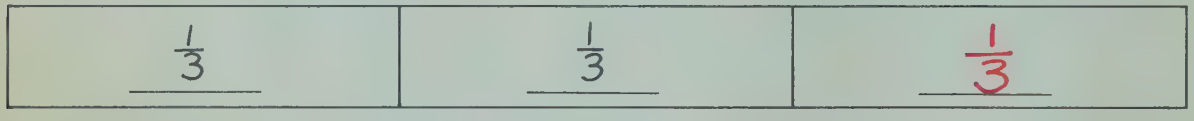
	a	b
6.	$\frac{1}{2} = \frac{4}{8}$	$\frac{1}{3} = \frac{2}{6}$
7.	$\frac{3}{4} = \frac{6}{8}$	$\frac{2}{3} = \frac{4}{6}$
8.	$\frac{2}{4} = \frac{4}{8}$	$\frac{3}{3} = \frac{6}{6}$



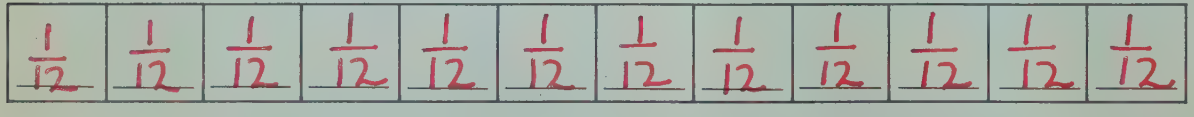
Shade the pairs of regions to show the fractions.

	a		b		c	
1.	 $\frac{1}{3}$	 $\frac{2}{6}$	 $\frac{3}{4}$	 $\frac{6}{8}$	 $\frac{1}{3}$	 $\frac{3}{9}$
2.	 $\frac{2}{4}$	 $\frac{1}{2}$	 $\frac{2}{3}$	 $\frac{6}{9}$	 $\frac{2}{3}$	 $\frac{4}{6}$

Write the fractions for the number strips.

3. 

4. 

5. 

Complete each pair of fractions. The number strips above may help you.

① $\frac{1}{3} = \frac{2}{6}$ ② $\frac{4}{6} = \frac{8}{12}$ ③ $\frac{2}{3} = \frac{8}{12}$ ④ $\frac{2}{6} = \frac{4}{12}$

⑤ $\frac{3}{6} = \frac{6}{12}$ ⑥ $\frac{1}{3} = \frac{4}{12}$ ⑦ $\frac{1}{6} = \frac{2}{12}$ ⑧ $\frac{2}{3} = \frac{4}{6}$

Write the simplest name for each fraction.

	a	b
1.	$\frac{4}{8} = \frac{4 \div 4}{8 \div 4} = \frac{1}{2}$	$\frac{3}{6} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$
2.	$\frac{2}{6} = \frac{2 \div 2}{6 \div 2} = \frac{1}{3}$	$\frac{2}{12} = \frac{2 \div 2}{12 \div 2} = \frac{1}{6}$
3.	$\frac{2}{4} = \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$	$\frac{4}{6} = \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$

Find the simplest name.

	a	b	c	d
4.	$\frac{3}{6} = \frac{1}{2}$	$\frac{2}{8} = \frac{1}{4}$	$\frac{6}{12} = \frac{1}{2}$	$\frac{4}{8} = \frac{1}{2}$

Add. Write the simplest name for each sum.

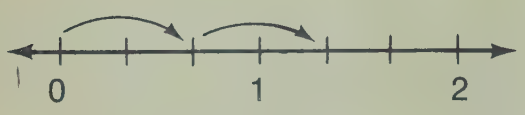
	a	b	c
5.	$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$	$\frac{1}{6} + \frac{3}{6} = \frac{2}{3}$	$\frac{2}{10} + \frac{4}{10} = \frac{3}{5}$
6.	$\frac{2}{12} + \frac{1}{12} = \frac{1}{4}$	$\frac{3}{8} + \frac{3}{8} = \frac{3}{4}$	$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$

Add or subtract. Some answers will have to be renamed.

① $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$	② $\frac{4}{6} - \frac{1}{6} = \frac{1}{2}$	③ $\frac{7}{12} - \frac{3}{12} = \frac{1}{3}$	④ $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$
⑤ $\frac{2}{9} + \frac{2}{9} = \frac{4}{9}$	⑥ $\frac{3}{12} + \frac{3}{12} = \frac{1}{2}$	⑦ $\frac{5}{8} - \frac{3}{8} = \frac{1}{4}$	⑧ $\frac{4}{9} + \frac{2}{9} = \frac{2}{3}$
⑨ $\frac{3}{8} + \frac{1}{8} = \frac{1}{2}$	⑩ $\frac{2}{6} + \frac{2}{6} = \frac{2}{3}$	⑪ $\frac{3}{9} - \frac{1}{9} = \frac{2}{9}$	⑫ $\frac{5}{6} - \frac{2}{6} = \frac{1}{2}$
⑬ $\frac{4}{12} + \frac{5}{12} = \frac{3}{4}$	⑭ $\frac{7}{9} - \frac{3}{9} = \frac{4}{9}$	⑮ $\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$	⑯ $\frac{6}{8} - \frac{1}{8} = \frac{5}{8}$

Answer the questions for each number line.

1.



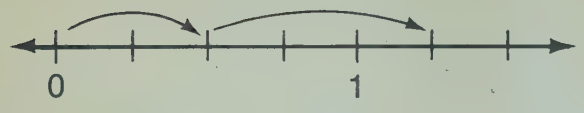
$\frac{2}{3} + \frac{2}{3}$

a Is the sum more than 1? Yes

b The sum is 1 and $\frac{1}{3}$ more.

c The sum is $1\frac{1}{3}$.

2.



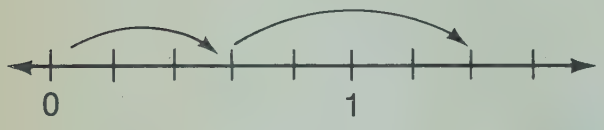
$\frac{2}{4} + \frac{3}{4}$

a Is the sum more than 1? Yes

b The sum is 1 and $\frac{1}{4}$ more.

c The sum is $1\frac{1}{4}$.

3.



$\frac{3}{5} + \frac{4}{5}$

a Is the sum more than 1? Yes

b The sum is 1 and $\frac{2}{5}$ more.

c The sum is $1\frac{2}{5}$.

Use >, <, or = to complete each sentence.

	a	b	c	d
4.	$\frac{5}{6} < 1$	$\frac{7}{3} > 1$	$\frac{5}{8} < 1$	$\frac{3}{3} = 1$
5.	$\frac{4}{3} > 1$	$\frac{3}{2} > 1$	$\frac{5}{5} = 1$	$\frac{5}{4} > 1$

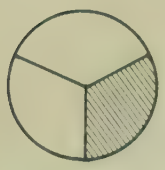
Rename each fraction.

① $\frac{4}{3} = 1\frac{1}{3}$ ② $\frac{3}{2} = 1\frac{1}{2}$ ③ $\frac{7}{4} = 1\frac{3}{4}$ ④ $\frac{11}{8} = 1\frac{3}{8}$

⑤ $\frac{7}{5} = 1\frac{2}{5}$ ⑥ $\frac{7}{6} = 1\frac{1}{6}$ ⑦ $\frac{5}{3} = 1\frac{2}{3}$ ⑧ $\frac{3}{9} = \frac{1}{3}$

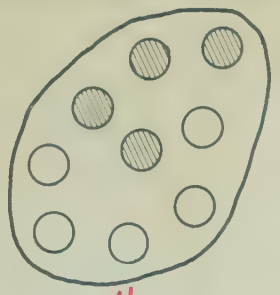
⑨ $\frac{6}{2} = 3$ ⑩ $\frac{8}{4} = 2$

1. Write a fraction for the shaded part or for the point marked by the arrow.



$\frac{1}{3}$

$\frac{5}{8}$

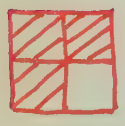


$\frac{4}{9}$

$\frac{3}{4}$

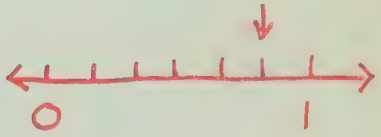
2. Draw a picture to show each fraction.
Use a number line, region, or set.

a $\frac{3}{4}$



b $\frac{1}{2}$

c $\frac{5}{6}$



3. Underline the greater fraction.

a $\frac{1}{4}$ or $\underline{\frac{3}{4}}$ **b** $\underline{\frac{3}{5}}$ or $\frac{2}{5}$ **c** $\underline{\frac{7}{8}}$ or $\frac{3}{8}$ **d** $\frac{3}{6}$ or $\underline{\frac{5}{6}}$

4. Add. Write your answers in simplest form.

a $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$ **b** $\frac{4}{9} + \frac{3}{9} = \frac{7}{9}$ **c** $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$ **d** $\frac{3}{8} + \frac{3}{8} = \frac{3}{4}$

e $\frac{4}{6} + \frac{2}{6} = 1$ **f** $\frac{2}{3} + \frac{2}{3} = 1\frac{1}{3}$ **g** $\frac{5}{12} + \frac{5}{12} = \frac{5}{6}$ **h** $\frac{6}{10} + \frac{7}{10} = 1\frac{3}{10}$

5. Subtract. Write your answers in simplest form.

a $\frac{4}{6} - \frac{1}{6} = \frac{1}{2}$ **b** $\frac{7}{8} - \frac{2}{8} = \frac{5}{8}$ **c** $\frac{3}{4} - \frac{1}{4} = \frac{1}{2}$ **d** $\frac{3}{9} - \frac{2}{9} = \frac{1}{9}$

e $\frac{7}{12} - \frac{4}{12} = \frac{1}{4}$ **f** $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ **g** $\frac{4}{5} - \frac{1}{5} = \frac{3}{5}$ **h** $\frac{7}{10} - \frac{3}{10} = \frac{2}{5}$

Compute.

	a	b	c	d	e
1.	$4.02 + $5.69 $9.71	$4.68 + $2.47 $7.15	$1.10 + $3.54 $4.64	$2.51 + $9.12 $11.63	$5.93 + $4.35 $10.28
2.	$6.11 − $3.47 $2.64	$6.47 − $2.01 $4.46	$8.83 − $2.14 $6.69	$5.00 − $3.17 $1.83	$5.00 − $1.67 $3.33

3. What is the value of each set of coins?

a $0.39

b $0.80

c $0.42

4. You are paying the salesclerk for something in a shop.
What change should you get back?
Use the table to help you count the change.
The first one is done for you.

Cost of purchase	Amount given clerk	Pennies	Nickels	Dimes	Quarters	Dollars
Ex. $0.67	$1.00	III	I		I	
$0.89	$1.00	I		I		
$0.74	$1.00	I			I	
$0.63	$1.00	II		I	I	
$0.58	$1.00	II	I	I	I	
$0.32	$5.00	III	I	I	II	IIII
$1.75	$5.00				I	III
$2.69	$5.00	I	I		I	II
$6.31	$10.00	IIII	I	I	II	III

1. Why does the cost of the same item differ at different times and in different places?
   Answers may vary.
   a Supply and demand
   b Season— especially produce
   c Shipping costs
   d Taxes

2. Why do items sometimes go up in price? Give several reasons.
   Answers may vary.
   a Large demand
   b Small supply – For example if there were a strike
   c Seasonal variations that affect the supply
   d Increased production costs or selling costs

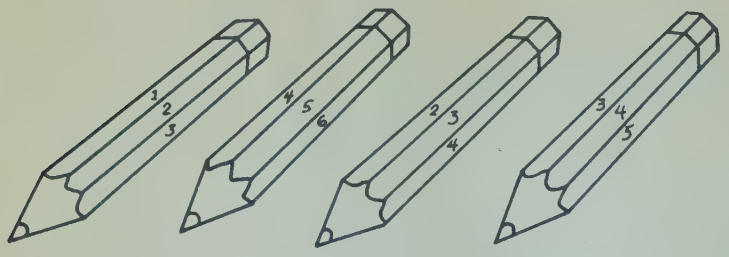
3. How does advertising help sell items?
   Answers may vary.
   a Informs people of availability
   b Shows price – for example if low
   c Tells about advantages of product
   d Makes product seem like a necessity

4. What do you think makes a good ad in a newspaper or magazine?
   Answers may vary.
   a Bold print – easily read
   b Bright colours
   c Interesting in some special way
   d Pictures

5. You bought two items.
   One for $1.69.
   Another for $2.35.
   You gave the clerk $10.00.
   How much change should you get? $5.96

1. Sue took the record out of the case and put it on the record player.
She did not look to see what side was up.
Are side 1 and side 2 equally likely outcomes? Yes

2. Take four pencils. Number the six sides of each pencil 1 through 6.

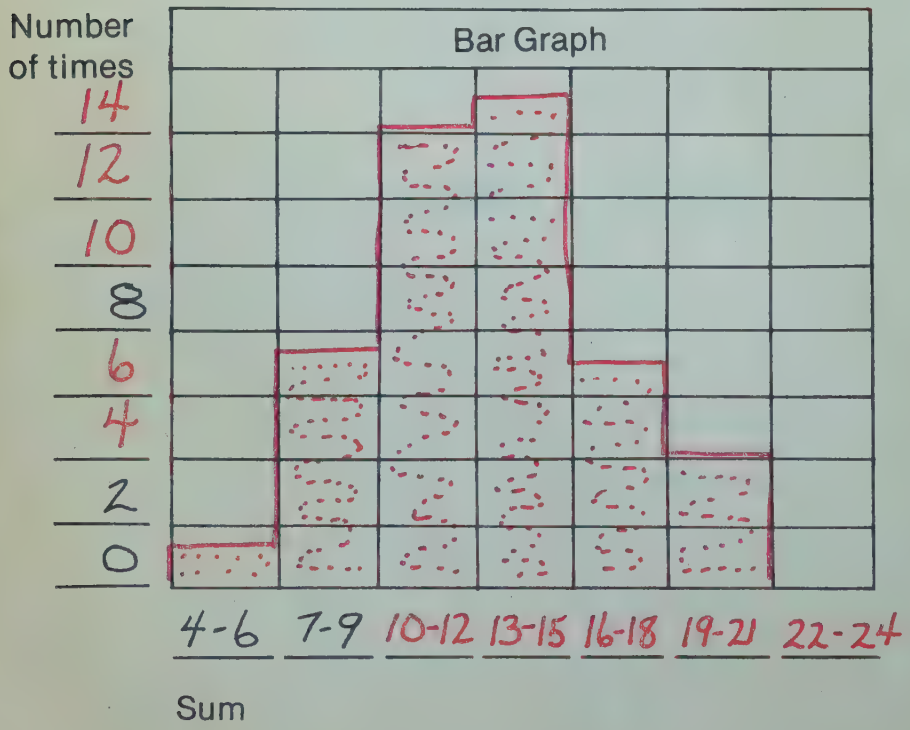


a If you rolled four pencils, what is the smallest sum you could get? 4

b What is the largest sum? 24

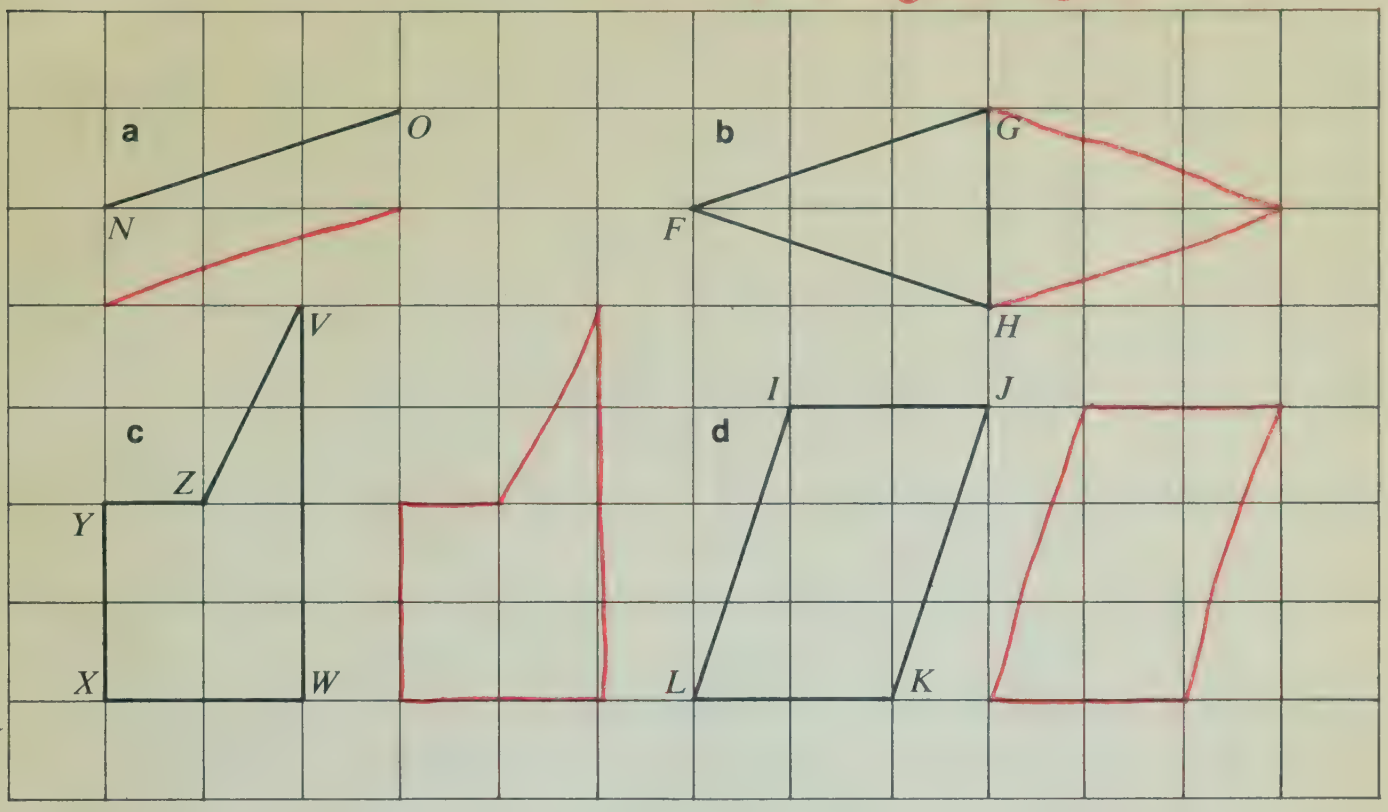
c Roll the pencils 48 times. Mark each sum in the Tally Chart. Answers will vary.

d Shade in the Bar Graph to show your sums.

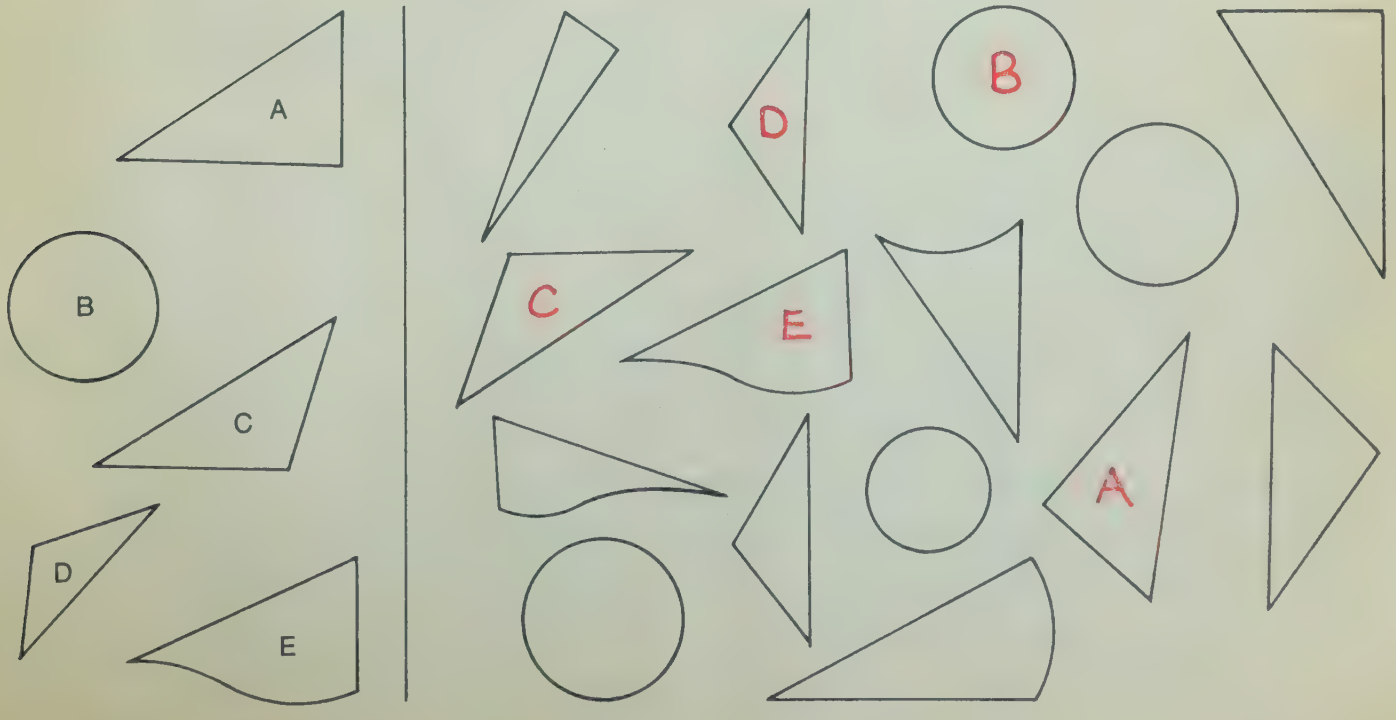


Tally Chart		
Sum	Tally	Number
4		0
5	𝍸	1
6		0
7	𝍸	1
8	𝍸	1
9	𝍸	5
10	𝍸	2
11	𝍸	5
12	𝍸 𝍸	7
13	𝍸	4
14	𝍸 𝍸	7
15	𝍸	4
16	𝍸	4
17	𝍸	2
18	𝍸	1
19	𝍸	1
20	𝍸	2
21	𝍸	1
22		0
23		0
24		0

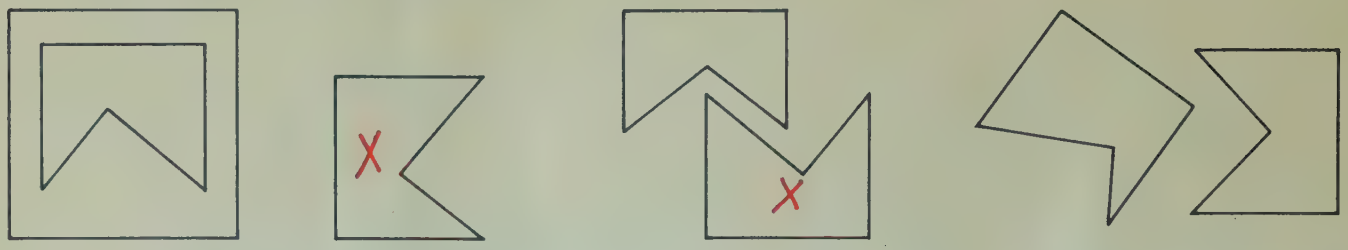
1. Draw a figure congruent to each. Positions of congruent figures may vary.



2. Trace to find the congruent figures.
Mark each congruent figure with the correct letter.



1. Mark an X on the shapes congruent to the shape in the box.
Trace the shape if you want help.



2. How many different shapes are there in pattern A? 2
Use two different shapes to make up a pattern of your own.

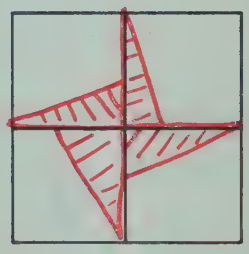
Answers will vary.

A

3. Use the pattern in B to make five different floor designs.

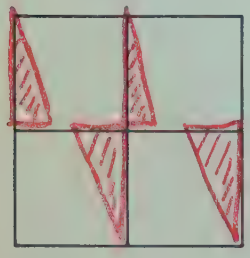
B

Design 1

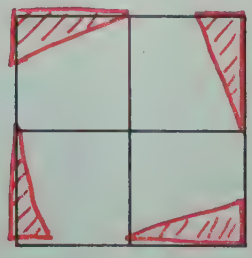


Design 2

Design 3



Design 4



Design 5

4. Are the shapes in this wall design congruent? Yes

Subtract.

	a	b	c	d	e
1.	91 − 6 = 85	63 − 9 = 54	60 − 8 = 52	22 − 7 = 15	73 − 5 = 68
2.	90 − 57 = 33	45 − 18 = 27	67 − 38 = 29	77 − 59 = 18	85 − 17 = 68
3.	121 − 36 = 85	135 − 98 = 37	107 − 89 = 18	164 − 77 = 87	151 − 99 = 52
4.	347 − 164 = 183	249 − 187 = 62	633 − 583 = 50	737 − 170 = 567	904 − 312 = 592
5.	520 − 261 = 259	910 − 389 = 521	241 − 188 = 53	604 − 125 = 479	913 − 896 = 17

Compute the differences.

	a	b	c	d
6.	766 274 − 75 906 = 690 368	834 386 − 32 829 = 801 557	790 712 − 73 292 = 717 420	806 241 − 693 425 = 112 816
7.	581 158 − 39 204 = 541 954	773 448 − 354 503 = 418 945	648 748 − 613 860 = 34 888	634 421 − 130 358 = 504 063
8.	993 900 − 185 730 = 808 170	825 500 − 392 504 = 432 996	845 050 − 458 859 = 386 191	895 006 − 371 746 = 523 260

Add.

	a	b	c	d
1.	66 + 29 = 95	47 + 45 = 92	19 + 62 = 81	14 + 37 = 51
2.	624 + 97 = 721	748 + 69 = 817	626 + 87 = 713	668 + 79 = 747
3.	477 + 885 = 1362	755 + 449 = 1204	891 + 849 = 1740	968 + 664 = 1632
4.	6649 + 8832 = 15 481	5576 + 8099 = 13 675	7860 + 3946 = 11 806	9842 + 8362 = 18 204
5.	81 894 + 5 861 = 87 755	59 887 + 33 652 = 93 539	79 235 + 47 067 = 126 302	98 659 + 71 593 = 170 252
6.	791 252 + 781 424 = 1572 676	183 330 + 233 369 = 416 699	612 974 + 563 249 = 1 176 223	431 803 + 325 994 = 757 797
7.	8 + 1 + 2 + 5 = 16	4 + 4 + 6 + 6 = 20	94 + 83 + 71 + 35 = 283	89 + 10 + 47 + 26 = 172
8.	5376 + 1370 + 5793 + 6341 = 18 880	9239 + 2424 + 7466 + 5596 = 24 725	4662 + 1099 + 1616 + 1528 = 8905	9794 + 4452 + 3167 + 4254 = 21 667

Multiply.

	a	b	c	d	e
1.	70 × 3 = 210	20 × 9 = 180	20 × 4 = 80	30 × 9 = 270	60 × 6 = 360
2.	50 × 5 = 250	60 × 9 = 540	30 × 4 = 120	60 × 5 = 300	80 × 4 = 320
3.	92 × 5 = 460	87 × 8 = 696	35 × 3 = 105	23 × 3 = 69	52 × 9 = 468
4.	46 × 7 = 322	53 × 8 = 424	75 × 5 = 375	95 × 2 = 190	57 × 6 = 342
5.	284 × 4 = 1136	298 × 6 = 1788	763 × 7 = 5341	345 × 8 = 2760	201 × 9 = 1809
6.	65 × 80 = 5200	78 × 90 = 7020	97 × 60 = 5820	23 × 50 = 1150	73 × 70 = 5110
7.	51 × 51 = 2601	95 × 97 = 9215	29 × 17 = 493	11 × 53 = 583	63 × 64 = 4032
8.	416 × 60 = 24 960	575 × 62 = 35 650	417 × 21 = 8757	819 × 38 = 31 122	285 × 41 = 11 685

Divide.

	a	b	c	d
1.	$5\overline{)68}$ R 13 R3	$7\overline{)93}$ 13 R2	$6\overline{)87}$ 14 R3	$6\overline{)95}$ 15 R5
2.	$6\overline{)245}$ 40 R5	$9\overline{)751}$ 83 R4	$8\overline{)449}$ 56 R1	$4\overline{)315}$ 78 R3
3.	$2\overline{)513}$ 256 R1	$5\overline{)741}$ 148 R1	$8\overline{)677}$ 84 R5	$9\overline{)127}$ 14 R1
4.	$5\overline{)5226}$ 1045 R1	$4\overline{)1959}$ 489 R3	$3\overline{)6650}$ 2216 R2	$6\overline{)2309}$ 384 R5

Use >, <, or = to complete each sentence.

	a	b	c	d
1.	$\frac{2}{3}$ (>) $\frac{1}{3}$	$\frac{3}{5}$ (<) $\frac{4}{5}$	$\frac{5}{6}$ (>) $\frac{3}{6}$	$\frac{2}{4}$ (<) $\frac{3}{4}$
2.	$\frac{3}{4}$ (>) $\frac{3}{8}$	$\frac{6}{8}$ (>) $\frac{6}{9}$	$\frac{4}{6}$ (<) $\frac{4}{5}$	$\frac{8}{9}$ (>) $\frac{8}{12}$
3.	$\frac{2}{3}$ (>) $\frac{1}{6}$	$\frac{1}{4}$ (<) $\frac{6}{8}$	$\frac{1}{2}$ (>) $\frac{2}{8}$	$\frac{4}{10}$ (<) $\frac{3}{5}$

Complete.

4.	$\frac{1}{3} = \frac{2}{6}$	$\frac{2}{4} = \frac{1}{2}$	$\frac{4}{6} = \frac{2}{3}$	$\frac{3}{6} = \frac{1}{2}$
5.	$\frac{4}{10} = \frac{2}{5}$	$\frac{5}{6} = \frac{10}{12}$	$\frac{2}{2} = \frac{9}{9}$	$\frac{1}{2} = \frac{6}{12}$
6.	$\frac{1}{3} = \frac{3}{9}$	$\frac{3}{12} = \frac{1}{4}$	$\frac{2}{3} = \frac{8}{12}$	$\frac{4}{8} = \frac{1}{2}$

Write the simplest name.

7.	$\frac{2}{4} = \frac{1}{2}$	$\frac{4}{10} = \frac{2}{5}$	$\frac{2}{8} = \frac{1}{4}$	$\frac{3}{9} = \frac{1}{3}$
8.	$\frac{6}{8} = \frac{3}{4}$	$\frac{3}{6} = \frac{1}{2}$	$\frac{6}{10} = \frac{3}{5}$	$\frac{4}{12} = \frac{1}{3}$

Write a mixed number for each.

9.	$\frac{3}{2} = 1\frac{1}{2}$	$\frac{5}{4} = 1\frac{1}{4}$	$\frac{7}{3} = 2\frac{1}{3}$	$\frac{7}{5} = 1\frac{2}{5}$
10.	$\frac{11}{8} = 1\frac{3}{8}$	$\frac{11}{6} = 1\frac{5}{6}$	$\frac{11}{10} = 1\frac{1}{10}$	$\frac{17}{12} = 1\frac{5}{12}$
11.	$\frac{5}{2} = 2\frac{1}{2}$	$\frac{13}{4} = 3\frac{1}{4}$	$\frac{10}{3} = 3\frac{1}{3}$	$\frac{13}{6} = 2\frac{1}{6}$

Add.

	a	b	c	d
1.	$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$	$\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$	$\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$	$\frac{1}{10} + \frac{5}{10} = \frac{6}{10} = \frac{3}{5}$
2.	$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$	$\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$	$\frac{3}{9} + \frac{2}{9} = \frac{5}{9}$	$\frac{2}{6} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$
3.	$\frac{5}{8} + \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$	$\frac{3}{10} + \frac{2}{10} = \frac{5}{10} = \frac{1}{2}$	$\frac{7}{12} + \frac{3}{12} = \frac{10}{12} = \frac{5}{6}$	$\frac{1}{2} + \frac{1}{2} = \frac{2}{2} = 1$
4.	$\frac{1}{9} + \frac{4}{9} = \frac{5}{9}$	$\frac{7}{100} + \frac{3}{100} = \frac{10}{100} = \frac{1}{10}$	$\frac{4}{9} + \frac{1}{9} = \frac{5}{9}$	$\frac{13}{100} + \frac{12}{100} = \frac{25}{100} = \frac{1}{4}$

Subtract.

5.	$\frac{3}{8} - \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$	$\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$	$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$	$\frac{58}{100} - \frac{32}{100} = \frac{26}{100} = \frac{13}{50}$
6.	$\frac{5}{5} - \frac{2}{5} = \frac{3}{5}$	$\frac{5}{6} - \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$	$\frac{5}{10} - \frac{3}{10} = \frac{2}{10} = \frac{1}{5}$	$\frac{7}{8} - \frac{3}{8} = \frac{4}{8} = \frac{1}{2}$
7.	$\frac{7}{9} - \frac{2}{9} = \frac{5}{9}$	$\frac{2}{2} - \frac{1}{2} = \frac{1}{2}$	$\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$	$\frac{11}{12} - \frac{3}{12} = \frac{8}{12} = \frac{2}{3}$
8.	$\frac{3}{12} - \frac{1}{12} = \frac{2}{12} = \frac{1}{6}$	$\frac{4}{9} - \frac{1}{9} = \frac{3}{9} = \frac{1}{3}$	$\frac{9}{10} - \frac{5}{10} = \frac{4}{10} = \frac{2}{5}$	$\frac{48}{100} - \frac{24}{100} = \frac{24}{100} = \frac{6}{25}$

Add or subtract. Watch the signs.

9.	$\frac{3}{5} + \frac{2}{5} = \frac{5}{5} = 1$	$\frac{7}{12} + \frac{2}{12} = \frac{9}{12} = \frac{3}{4}$	$\frac{2}{12} - \frac{1}{12} = \frac{1}{12}$	$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$
10.	$\frac{27}{100} - \frac{21}{100} = \frac{6}{100} = \frac{3}{50}$	$\frac{6}{9} + \frac{2}{9} = \frac{8}{9}$	$\frac{3}{3} - \frac{2}{3} = \frac{1}{3}$	$\frac{6}{8} - \frac{1}{8} = \frac{5}{8}$
11.	$\frac{4}{10} + \frac{4}{10} = \frac{8}{10} = \frac{4}{5}$	$\frac{2}{4} - \frac{1}{4} = \frac{1}{4}$	$\frac{21}{100} + \frac{29}{100} = \frac{50}{100} = \frac{1}{2}$	$\frac{2}{6} - \frac{1}{6} = \frac{1}{6}$
12.	$\frac{2}{3} + \frac{1}{3} = \frac{3}{3} = 1$	$\frac{5}{12} - \frac{3}{12} = \frac{2}{12} = \frac{1}{6}$	$\frac{6}{8} + \frac{1}{8} = \frac{7}{8}$	$\frac{3}{5} - \frac{1}{5} = \frac{2}{5}$

☐ indicates a Checkout page.
• indicates a Progress Check page.

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